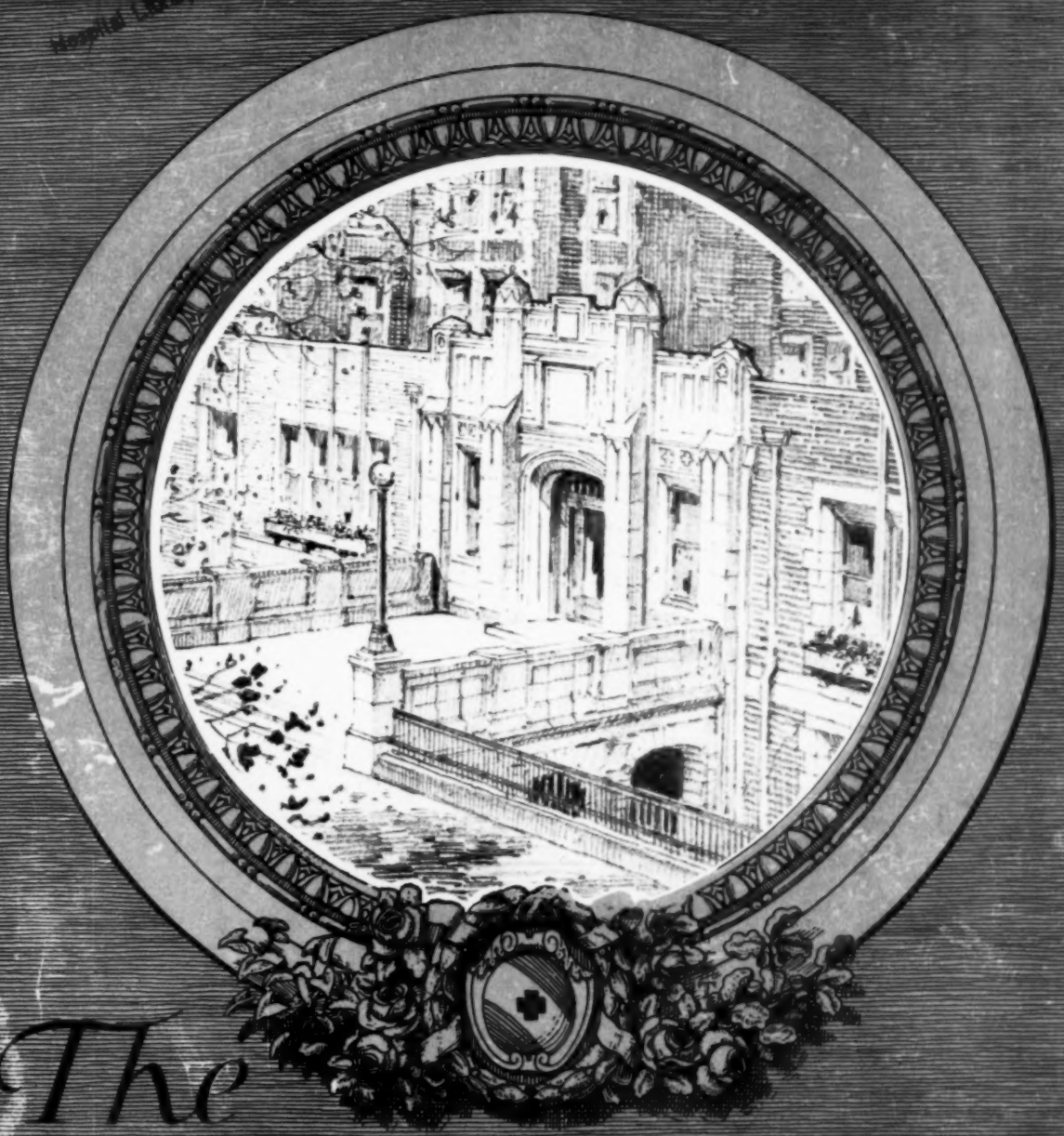

The MODERN HOSPITAL

Vol. XLI JULY, 1933 No. 1

For Longer Wearing... Better Looking Linens

CONTROLLED BLEACHING

DO your linens frequently come up from the laundry showing more wear and tear than you think they should? Do they sometimes seem cloudy or mottled... uneven in color? Don't blame these unsatisfactory results on employees or equipment. They are usually due to improper bleaching control—to over-bleaching or under-bleaching with unstable bleaches.

By using HTH, your laundryman can always have uniform, stable solutions and put an end to over-bleaching and under-bleaching. Every can of HTH contains a fixed amount of chlorine—measured and tested at the plant. HTH and HTH solutions are uniform in strength and highly stable. They retain their concentration over long periods. These properties enable the laundryman to control the bleaching process so perfectly that there never need be any question about the amount of bleach required to do the work effectively.

Have your laundry try using HTH and see how much better your linens look—more uniformly white, fresher and sweeter-smelling. And better still, notice how much longer they wear, because there's no excessive loss of tensile strength.

Find out what a big difference controlled bleaching makes. Call up your supply house and order a trial lot of HTH—enough to make a thorough trial. Full directions come with every shipment.

HTH is a highly concentrated calcium hypochlorite packed in 4-lb. cans, one dozen to the case. Each 4-lb. can of HTH, together with added soda base, produces 30 gallons of sodium hypochlorite bleach solution containing 1% of available chlorine.

***The* MATHIESON ALKALI WORKS (*Inc.*), 250 Park Ave., New York, N. Y.**

Soda Ash... Liquid Chlorine... Bicarbonate of Soda... HTH and HTH-15... Caustic Soda... Bleaching Powder... Ammonia, Anhydrous and Aqua... PH-Plus (Fused Alkali)... Solid Carbon Dioxide.

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For July, 1933

COVER PAGE—Entrance to Jewish Hospital, Philadelphia

ORIGINAL ARTICLES

Just in Passing—

THE Industrial Recovery Act is being discussed everywhere and its possible significance to hospitals is considered editorially in this issue.

The social planning of industry in general is a novel adventure for the United States in peace times, but social planning has been a conscious ideal of hospital administration for many a day and its translation into practice could probably be accomplished without any sort of mental shock.

This and other ideas in keeping with the times will doubtless be presented for consideration at the special meeting of the delegates of local hospital associations and councils which is to open the annual convention of the A. H. A. in September, as announced in our news columns.

WITH so many new building projects postponed the need for modernization becomes more urgent. To oust obsolescence and maintain prestige is the aim of every enterprising hospital that expects to hold its position in the community.

Plans for rehabilitation, therefore, are occupying the minds of many these days and one thing for them to remember is that it is easy to waste thousands of dollars on uneconomic repairs. The plan should be comprehensive and should take into consideration both the transitional period and the ultimate goal sought. Economic replanning should precede physical rebuilding. Budgeting doesn't mean attempting to save money on everything; it means spending most on things of which you expect most.

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CONTENTS

THIS issue of The MODERN HOSPITAL is designed to suggest ways in which a hospital can profitably improve existing buildings, by structural changes, redecorating, refurnishing and other measures. The Hannaford article tells, among other things, of subdividing large open wards into cubicles; of converting de luxe suites into two-bed private rooms. The metamorphosis of a New Jersey hospital by means of new equipment, floors, wall coverings, paint, draperies, is related. Suggestions galore are offered on inexpensive but well made and good looking pieces of furniture and accessories that will do much to give a hospital a well groomed appearance and rid it of the forlorn look that too often sends a patient's heart into his boots as he waits drearily to be examined or treated.

Among the modern aids to comfort, health and efficiency none is more eagerly sought in these days of devastating summer heat than some means of regulating our indoor climate. A sympathetic ear will undoubtedly be lent by readers to the news given about air conditioning equipment and methods in the article on page 77.

WITH our recently augmented editorial staff we are now able to get about more among individual hospitals. Such contacts put us in touch with questions of current interest that are uppermost in the minds of hospital workers. Realizing that these same questions are facing others, we have decided, as an added service to readers, to assemble them and devote a page in each issue to a discussion of the topics brought to the surface in this way. "Someone Has Asked—" will appear as a regular monthly feature. The first installment is on page 44. Readers are invited to send us practical questions for this new department.

ANOTHER innovation appears on page 84, where we tell "What Others Are Doing." This department we hope will develop into an interchange of helpful suggestions.

IODOBISMITOL SQUIBB

penetrates the central nervous system in over 90% of cases . . .*

MOST bismuth preparations present bismuth largely in cat-ion form. In Iodobismitol the bismuth exists in an-ionic form, a form which greatly facilitates meningeal penetration and therefore makes it an effective agent for the prophylaxis and treatment of neuro-syphilis.

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*Ref.: J. A. M. A., 98: 537, 1932.

E·R·SQUIBB & SONS, NEW YORK

MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

Many readers have "back home" ideas that are worth attention and we are now offering a medium for passing these on to others. Concise stories of proved operations and procedures will find their place in the pages of this new section and from them valuable suggestions will come for application in similar cases.

THE hospital councils for constructive economy that are springing into existence in various parts of the country have the right idea. These councils made up of representatives of hospitals in a community study the local situation so that they may be able to suggest economies leading to improvements in hospitals rather than to curtailment of important community services. In a time like the present study is needed. Haste and thoughtlessness in evolving new plans should be avoided. Mr. Mannix's article on page 50 is a detailed account of what Ohio has done and plans to do in this direction.

THE community relations program for hospitals spreading over the country has been measurably advanced by the publication in lay magazines of articles bringing out the part played by hospitals in ensuring community stability. The following paragraphs are taken from "Community Assets Essential to Sustained Recovery," published in the May issue of *Bankers Monthly*, an article already widely quoted in national publications, such as the *Literary Digest* and the leading financial journals and newspapers.

"Because the underlying security supporting most values is the morale of the people, we must recognize that the emotional, mental and physical factors controlling the composite citizen are of such basic importance that they must be reckoned with. The elements which make for a high morale are the intangible, but none the less essential, security back of the real estate mortgage, the corporation bond, the commercial loan, and the bank.

"Public confidence is maintained through faith in the institutions that serve the average citizen. Most of us feel more than we think. Emotional reactions have greater control than intellectual processes."

THE MODERN HOSPITAL

THE MODERN HOSPITAL PUBLISHING CO., INC.
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THE MODERN HOSPITAL

A Monthly Journal Devoted to the Construction, Equipment, Administration and Maintenance of Hospitals and Sanatoriums

VOL. XLI *July, 1933* NUMBER 1

Health, Happiness and Hospitals

By H. S. CUMMING, M.D.
Surgeon General, U. S. Public Health Service, Washington, D. C.

IN THE 7,000 hospitals in the United States approximately 800,000 patients are found at all times. About 400,000 of these are mental patients and about 100,000 are tuberculous patients. Of the remaining 300,000, some are seeking surgical or medical treatment for critical conditions, some have obscure diseases requiring special diagnostic measures and some suffer from chronic disabilities, perhaps in terminal states. All need care that cannot be given in their homes. In these hospitals nearly 800,000 babies are born each year.

Such is our regard for hospitals that efforts are made to admit every patient in serious condition. Otherwise, we feel that perhaps the very best provision has not been made. Like the sterling mark on silver, hospital care ensures a certain definite standard. Perhaps a relative has been injured far from home. If he has been taken to a hospital we are confident that the best medical and surgical care in that neighborhood has been provided. But if he has been taken to any other place we are apprehensive because we know that a physician, however capable he may be, works at a great disadvantage if the organized resources and teamwork of a hospital are not available.

It is well for public health and public morale that we have hospitals. They are much more necessary under modern conditions of city life than they were when population was scattered and houses had not been largely replaced by small apartments. It is not pleasant to contemplate a modern world without hospitals—its mentally ill at large, its tuberculous furtively concealing their affliction, the peace and happiness of many homes shattered by a lurking horror. Such a condition is unthinkable. We would never give up an institution that so vitally concerns our health, happiness and self-respect. We might be forced to sacrifice other things, but not our hospitals. Then let us accord the hospital its true place among human institutions. Regardless of cost we must have adequate, commodious, decent hospitals of various kinds to meet the exacting needs of the modern world.

A hospital is more than a place to treat the sick. It is a health center for the community, a clearing house of scientific information, a factor in medical education, a place for clinical research and a public health agency. The health officer depends confidently upon the hospital's reports on communicable

The American people have a high regard for their hospitals. They would never give up an institution so vitally concerned with their health, morale and self-respect. Regardless of cost, they insist upon adequate, commodious, decent hospitals to meet their exacting needs

diseases to enable him to check contagion at its source. The family physician relies upon the hospital for assistance in diagnosis and treatment not available elsewhere. Principal advances in clinical medicine originate in the wards where nurses must be schooled and interns must receive their practical instruction. Clinical research necessarily depends upon these institutions.

Hospitals Are Committed to Ethical Medicine

"The world would know little of the control of typhoid fever, diphtheria, scarlet fever, the eradication of yellow fever and many of the other achievements of modern medicine if a profound study of these problems under competent supervision had not been offered by our hospitals," says Asa S. Bacon, superintendent of Chicago's Presbyterian Hospital.

Just as monasteries during the Dark Ages preserved knowledge that would otherwise have been lost, so hospitals throughout evil times and good preserve the practices that become generally accepted by the medical profession. Hospitals perpetuate, not for one man or one period, but for universal use in all times, the discoveries and practices of eminent persons. Methods of treatment once approved are never lost again.

Conversely, the hospital usually, though not always, excludes the paraphernalia of the quack and acts as a clearing house for approved apparatus and methods. It is committed to ethical medicine and from its very nature is opposed to irregular practitioners and those who cater to the whims of the uninformed. It is a potent factor in combating charlatans and faddists who would deceive the public with impressive looking machines and ceremonial manipulations.

A reduction of 32 per cent in the general mortality was recorded during a recent five-year period. Public health measures were chiefly instrumental in reducing mortality from typhoid and other diseases transmitted by water and milk, but hospitals contributed to the reduction in mortality where the problem related to the individual. Control of cancer, pneumonia, heart disease, nephritis, arthritis and arteriosclerosis is a medical problem of the individual to be solved chiefly in hospitals. To reduce mortality from childbirth, from which 17,000 women die annually, hospitals must also contribute.

Nowhere is public health so well served and public morale so well sustained as in the tuberculosis and mental hospitals. We may except, perhaps, those general hospitals which in recent years have provided special facilities to ensure early diagnosis for tuberculosis and mental disease, as well as terminal care for neighborhood cases, and have also opened their wards to patients with venereal diseases to ensure segregation and proper treatment. Intensive treatment of syphilis, necessary to make the individual a safe member of society, is difficult outside of hospitals at certain periods. Lumbar punctures, so necessary to forestall neurosyphilis, and the modern treatment for early paresis cannot be carried out in routine manner except in a hospital.

We have learned that mental illness, feeblemindedness and a host of nervous diseases are preventable in a measure, and we must now devote ourselves to popularizing the knowledge of mental and nervous diseases just as we did the knowledge of tuberculosis. As the sanatorium and hospital were the first requirements in the tuberculosis campaign, so they will be first in the campaign for mental hygiene. I refer not only to the hospital for the mentally ill, upon which we shall always depend for the sympathetic and humane care that cannot be otherwise supplied, but to all large general hospitals. These institutions will need facilities for observation, diagnosis and classification of mental patients. One of the mistakes made in the tuberculosis campaign, to be avoided here, was the attempt to relegate care of patients entirely to specialists in special institutions, thus unwisely excluding the general practitioner from the field.

Luxuries and Costs

During the present period of economic depression the hospitals have carried on. One out of six banks has closed, one out of twenty-two businesses has failed but only one hospital out of forty-five has shut its doors. To provide proper facilities for the care of the sick—at least of the poor—has become a public obligation, and hospitals have somewhat the same relation to the public welfare as have police and fire departments and other community assets, like pure water supply, sanitary sewage disposal, public parks, schools and playgrounds. Hospital construction has been necessarily retarded by economic conditions but it must be resumed since some states still lack sufficient provision for tuberculous patients and most states lack sufficient hospital beds for mental patients.

While a proper standard of hospital care for various classes of patients is necessary and is provided for by the American College of Surgeons and similar organizations, I think that in our aim for perfection we have allowed certain unnecessary luxuries to become prevalent. There is a tendency to complain about cost and at the same time to insist on private rooms and special nurses, when small wards and group nursing ensure acceptable and sometimes better care. Gregarious persons who cannot spend an evening alone must

be indulged with a private room. While privacy is often desirable and sometimes necessary, the demand for seclusion when sick may be an expression of snobbery or unwillingness to bear minor discomforts with fortitude before other patients.

Although 85 per cent of diseases are said to present no difficulties in diagnosis and yield readily to treatment, we are given to ceremonial uses of x-ray and other expensive laboratory procedures and are unduly committed to scientific rituals, some of which might be omitted. Expensive hospital furniture and luxurious equipment have replaced simple hospital needs. If the pendulum swings backward a little now it will do no harm. We may lessen our demands for pomp and service without lowering our ideals or affecting results.

The special committee appointed by the Medical Society of the State of New York to consider the final report issued last November by the Committee on the Costs of Medical Care, believes that a community is not obligated "to give a perfectability of service simply because a part of the community demands it, when the costs would be beyond the ability of the community to bear."[1]

Prepayment Plan of Another Century

Much is being said about "group hospitalization." This plan has such an important bearing on hospitals and the morale of persons with small incomes that I am inclined to remind my readers that the United States Public Health Service originated from a plan for periodic payments by a group of working men. Between 1798 and 1884 all seamen employed on American merchant vessels contributed at first twenty cents and later forty cents per month to the marine hospital fund. These assessments were paid by the captain of each vessel to the collector of the port, who still functions in small ports to provide medical treatment for seamen. During the period of direct assessments merchant seamen paid $15,794,807.63 into the marine hospital fund and the United States government appropriated $19,622,371.87. All the old marine hospitals were built and operated out of these funds.

Direct assessments were discontinued after eighty-six years and in 1884 a tonnage tax was imposed upon vessels instead. This tax is still collected from ships although Congress now makes direct appropriations for the support of the marine hospitals and the name of the service was long ago changed from the Marine Hospital Service to the United States Public Health Service. The spirit of the intent of the original act signed by President John Adams is still carried out. In the last fiscal year 40,000 patients were admitted to marine hospitals, of whom 1,150 had tuberculosis, 7,000 had venereal disease and 2,000 had other communicable diseases.

The morale of the merchant seaman has been greatly improved by this sure provision for his care. His disability may result from employment aboard ship and hence, according to ancient maritime law, be a responsibility of the vessel. Or it may be due to nonnautical causes, and perhaps to personal neglect or delinquency. In either case he goes to a marine hospital. Although he falls sick in a strange port, the merchant seaman nevertheless feels secure in his hospital privileges and this contributes to his efficiency and hence to that of the American merchant marine. Public health and public morale and self-respect are similarly served in some degree by public and private hospitals.

[1]New York State Jour. of Med., April 15, 1933.

Maintenance Rules for Oxygen Therapy Equipment

To assure a successful oxygen therapy program in the hospital, it is necessary that the apparatus be kept in good condition and be properly used. The following helpful pointers in this respect were advanced recently by J. I. Banash, Chicago, and G. O. Carter, New York City, consulting engineers.

One specific person should be in charge of the maintenance of oxygen therapy apparatus; the engineer may be the logical person or a competent technician. Whoever it is should understand the principles of operation of the tents and other oxygen administering apparatus in the institution, should have a working knowledge of the operation of oxygen regulators, and should be completely familiar with the necessary safety measures.

In the case of motor driven tents, the manufacturer's instructions should be followed with regard to lubrication. No lubricant should be used on any parts of oxygen regulators or on the outlet valves of the oxygen cylinders.

The ice chamber should be cleaned thoroughly after use so that no residue can accumulate in the chamber or clog the drains. The testing equipment used to determine the actual condition of the atmosphere breathed by the patient should be carefully maintained in proper working order. The rubber hose leading to the tent should be inspected periodically. Kinking of this hose should be avoided.

The fabric of the tent should be inspected occasionally. The fabric can be observed against a light to detect cracks and worn-out places. Temporary repairs may be made with adhesive tape. A rough check for leakage may be made by an approximate test of the tightness of the fabric by observation on initial charging. If the time necessary for arriving at a given oxygen concentration or if the flow rate necessary to maintain this concentration varies considerably from data on tent operation, supplied by the manufacturer, this indicates excessive leakage.

All tents should be sterilized immediately after use. Between treatments, the tents should be stored whenever possible in a dry room, fairly cool and well ventilated.

Someone Has Asked—

Should Malt Liquors Be Allowed in the Interns' Quarters?

A nurse superintendent, confused by recent legislative action, requests an opinion on this subject. She states that since the sale and consumption of beer have been made legal, interns in her institution consume this beverage within the hospital.

Tolerance to alcohol is a personal and varying matter. The odor of beer is not particularly pleasing to patients when it emanates from the person of a physician. For this reason it is wise to forbid its consumption on hospital grounds. Certainly the use of intoxicants by nurses and doctors during working hours should be forbidden. It is the belief, therefore, of The MODERN HOSPITAL that every institution should extend the rule in regard to consumption of spirituous liquors to cover malt beverages as well.

Should the Hospital Charge a Flat Fee for Any of Its Services?

An Eastern hospital superintendent, disturbed by the fact that a staff member has charged the hospital with unethical practice because it has set a flat fee for certain services, requests an answer to this question.

The physician's code of ethics decries the practice of contract medicine. The physician in question apparently believes that the fixing of a flat fee for any service represents this type of agreement. Since many hospitals commonly charge a flat fee for the removal of tonsils, for the care of the maternity patient and for the performance of certain laboratory studies, this topic becomes interesting and timely. Contract medicine is an agreement between a physician and a group of persons which presupposes the rendition of certain services at a flat and usually minimum monthly or annual rate per person. It implies a lack of individualization in the study of each case and hence is likely to bring about improper service to the sick.

It is doubtful if the hospital's promise to render certain services for a flat fee can be interpreted as contract medicine. In agreeing to render these services and to furnish certain supplies for a fixed sum, the hospital could just as easily divide this gross amount into its component parts by itemizing the cost of each service. If this is contract medicine, then a physician who agrees to furnish prenatal, obstetrical and postnatal services for a fixed sum is also practicing contract medicine.

The remedy lies in bringing about a better understanding between staff members and the hospital itself as to the underlying reasons for the adoption of certain financial policies. The fixing of certain flat minimum rates for hospital service is not unethical and the superintendent who asked this question can be assured that the plan he has adopted has much to commend it and little, if anything, to condemn it.

How Should the Hospital Treat Gas Poisoning?

Carbon monoxide is commonly employed as an agent of self-destruction. Accidental intoxication with this gas frequently takes place. Unconscious persons who have inhaled illuminating gas are often brought to the accident ward. Recent medical literature contains encouraging descriptions of the beneficial clinical effects following intravenous injection of a solution of methylene blue in cases of gas poisoning. Methylene blue in 1 per cent solution is now on the market in 50 cc. ampules suitable for intravenous use. Every accident ward should be supplied with a sterile solution of this chemical.

When respiration has ceased or has become shallow, the respirator often saves life. This apparatus is usually equipped with an adjustment whereby oxygen can be administered while the patient is under treatment. The intramuscular administration of oxygen is sometimes advised. While the medical profession does not agree as to the method by which methylene blue benefits the patient, it is probable that some specific action takes place whereby the oxygen carrying property to the red corpuscles is enhanced. At any rate with proper drug equipment for the treatment of a poisoned cardiac apparatus, with a respirator and a methylene blue solution at hand, the patient will have the greatest possible chance of recovery.

Are Vacations Necessary in This Time of Economic Stress?

That vacations should not be granted to hospital employees because of present financial difficulties is the contention of some members of hospital boards. A more shortsighted policy could not be adopted. Hospital workers almost without exception have been willing to accept salary reductions because they were convinced that the good of the institution demanded it. They have maintained a high morale in the face of great difficulties. They have been required to perform not only their own work but that of employees the hospital was forced to discharge. This year hospital employees are in greater physical need of a vacation than ever before. Good administrative practice will make it possible for those who remain at home to perform the work of those enjoying a holiday and no added expense will result because of vacations.

Those who continually come in contact with the sick need time away from their duties in order to maintain physical strength and morale. Vacations should be granted this year and every other year if the best work is to be had from both medical and lay members of the staff.

What Is an Emergency Operation?

This inquiry comes from a hospital staff surgeon. Usually such definitions of emergency procedures are sought by hospital administrators. Most institutions have enacted rules requiring that certain routine steps be taken before an elective operation may be performed. These rules are rightfully laid aside when a true emergency arises. But the term "emergency" is so often abused that sometimes hospital authorities justly question the urgency of a so-called emergent surgical procedure. Too often the surgeon, to evade what he terms "red tape," declares that an emergency exists and hence secures precedence over his colleagues on the day's operating schedule.

If in the physician's honest judgment the patient's chances for a prompt and permanent recovery will be reduced by delay in surgical treatment, then and only then does a true emergency exist. It is unfair and dishonorable to attempt to evade the rules governing operating room schedules by such sharp practices.

If you have any questions to ask, the editor will be glad to discuss these in a forthcoming issue.

The Hospital Is Known by the Furnishings It Keeps

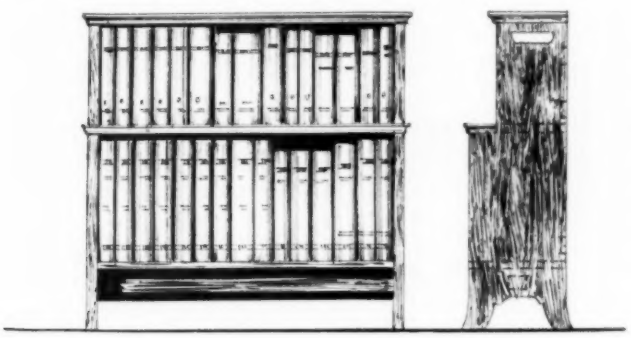
By RAYMOND P. SLOAN
Associate Editor, The MODERN HOSPITAL

What does the well dressed hospital wear in these days when a good "front" is more essential than ever before? The answer is found in a trip through numerous departments in the Medical Center of the New York Hospital and Cornell Medical College, in the course of which will be discovered many ideas that will fit in well with a modernization program designed to accomplish surprising changes at low cost

WHAT type of picture will the hospital present to the appraising eye of the public during the coming months? Will it be one upon which the mark of depression is indelibly stamped, frankly advertising shrunken incomes and reduced budgets? Or will it be one in which touches of modernization and rehabilitation are clearly manifest, creating an atmosphere of cheer and a disposition to make the best of bad times?

Before attempting to answer such questions intelligently, let me explain that the word "picture" as used here pertains exclusively to household furnishings and decorative treatment—details that either repel the patient and his visitors, or attract them. In other words, I shall consider hospital surroundings in their entirety, from the first impression the visitor gains as he steps into the entrance hall to his feelings as he wanders along the corridors and inspects even the remotest room in the nurses' home.

Were the minds of hospital executives first set at ease regarding the practical side of the situation, there would not be the slightest doubt as to their reply to the foregoing questions. By all means, the picture should feature modernization and rehabilitation. But how can modernization and rehabilitation be accomplished under present economic conditions?



Sketches by courtesy of Myers, Minott & Co., New York City.

The student nurses' bedrooms contain bookcases, with two shelves. The top of the case may be used as an end table or night table.

Hopeless as the problem may seem at first, certain compensating factors go a long way toward its solution. Confusing as economic conditions are at the present time, they do offer unprecedented opportunities by which a comparatively small amount of money wisely expended can be made to go a long way. Never before have prices of household furnishings been so low. Never before have the services of professional decorators and painters been available at such small cost.

Speaking more specifically, a reception room can be furnished at less than half the cost of identical furnishings two or more years ago. New touches can be introduced into the wards to relieve them of monotony and develop in them something of the air of private accommodations. Private rooms, too, offer numerous opportunities for this freshening process. Hangings and draperies, for example, are procurable at prices unheard of a few years ago. Nurses' rooms may be completely refurnished at unbelievably low cost.

The first step in undertaking such a program is to formulate a well designed plan as to what is needed. The second step is to secure expert advice and guidance in order to obtain every advantage

Aluminum easy chairs are provided for the wards and the solariums. In the solariums, these have an aluminum ottoman with a cushion top.

of the present low market, to say nothing of an artistic decorative effect.

An interesting example of what may be accomplished in effective hospital furnishing at moderate cost is found in the Medical Center of the New York Hospital and Cornell Medical College, New York City, the architectural features of which were described in The MODERN HOSPITAL for March, 1933.

Treatment of the visitors' waiting room sounds an extremely practical note almost at the very entrance to the hospital. This room deserves a brief inspection en route to the public and private pavilions on the floors above. Underlying considerations in furnishing this unit were the use to which it would be put and the large number of people of all classes it would accommodate. Simplicity and durability, then, form the keynote. The principal seating arrangement is a simple adaptation of an early New England type of spindle-back settee. Seat, legs and top rails are stained and finished in a penetrating lacquer. Spindles in natural color lighten the general effect of the piece.

Comfort Achieved at Low Cost

Stepping from the elevator to a public pavilion floor, the first impression is one of warmth and color. A second glance reveals numerous details that give a homelike touch and eliminate much of the old ward atmosphere. No ward unit contains more than sixteen beds and each group of four beds is separated by glass partitions. Close examination of a typical four-bed ward reveals the effect and comfort that have been achieved at comparatively low cost.

First, let us examine the color scheme. Walls are painted a grey-ivory tone harmonizing with the light and dark shades of grey-green linoleum tile on the floors. The wall trim is also grey-green to match the darker shade in the floor. Beds, bedside tables and over-bed tables are finished in the same color as the trim, but in a lighter shade. Professional decorators have found that lighter tones tend to reduce the apparent size of the pieces in a room.

Now let us proceed with the general effect that greets the visitor. Bedspreads are white and throw blankets are of a light camel's hair color. The Windsor bedside chair is finished in a medium walnut tone. The easy chair, one of which is allowed for each group of four beds throughout the hospital, is made of aluminum. Its frame is finished to match the other metal furniture and its cushion seat and back are upholstered in a yellow waterproof fabric, thus introducing a cheerful bit of color.

A screen, whose single metal panel is the same color as the bed, is supplied for each four-bed unit. Completely surrounding each bed are curtains of a special cotton material the same color as the walls, but slightly darker in tone. Cubicle curtains of the same material cover the glass between the rooms or spaces in the same rooms.

Easy Chair Is Adjustable

Gatch-bottom beds with spring unit mattresses and separate hair pads are used throughout. These beds have four wheels, two with brakes, and the two posts at the head have revolving bumpers.

With this general appearance of the room in mind, it is now possible to study certain details of construction of the individual pieces of equipment. The bedside table has a molded rubber top of mottled green, slightly darker than the table, but harmonizing with its color. This piece contains one drawer, a towel rack and a swinging basin rack in an open compartment. A feature of the overbed table is its three-part top, the center section being adjustable as a reading stand. The rubber top is the same as that used on the bedside table, but it is inlaid with a chromium frame. The table is adjustable by means of spring catches placed at both sides.

A Windsor chair can be most comfortable provided it is properly designed. Unfortunately, however, sufficient care is rarely given to its construction. The bedside chairs at the New York Hospital have extra thick seats and deep saddles. Legs and spindles are doweled through the seat and wedged. Repair on improperly constructed Windsor chairs causes continual maintenance cost. By wedging in the manner described, it is impossible for the legs to become separated from the seat. Also, by using the extra heavy seat, the same support is given to the legs that is obtained by using a frame around the seat of the chair.

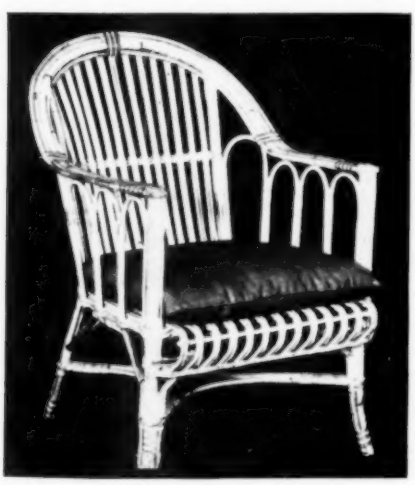
Careful inspection of the easy chair reveals that it is adjustable, both as to seat and back, from two supports so that its position can easily be changed by pressure on the back. The friction lock on one side holds the seat and back in the desired position. Maximum comfort is assured by an inner spring unit seat and back.

The bed curtains already described are hung on special noiseless roller curtain hooks. The fabric selected is special cotton cloth in a bird's-eye design, woven seventy-two inches wide. It is supershrunk and in tests over a considerable period of time passed through the laundry more often than any other fabric tested, without fraying, shrinking or changing color. Consequently, it might well be regarded as more economical than cloth whose original cost was less.

Cubicle curtains are arranged to draw so that they can be controlled in series from one end of each partition. They are hung from a special hook with a button on the end, and buttonholes are sewed in the top hem of the curtain, thus eliminating all metal from the fabric.

Most significant fact of all is that this entire equipment cost approximately $440 for each complete four-bed unit. In other words, the price per bed was $110.

At the end of each typical pavilion is a solarium. A moment's study of its furnishings shows that an exceedingly effective color scheme has been achieved. The walls and ceiling are tinted a light sage green, the trim is a darker green and the floors are of red quarry tile. Venetian blinds at the windows are a darker shade of green than the trim.



Four easy chairs of reed in natural color, wrapped with green and yellow French cane, are in each solarium.

The whole setting is restful and forms an effective background for the furniture which is attractive in appearance and exceedingly practical. This includes two aluminum chairs, like those found in the ward, but equipped with an aluminum ottoman with a cushion top. There are also two folding card tables finished in walnut color with green waterproof tops. Twelve metal folding chairs, painted the same color as the ward furniture and fitted with yellow waterproof fabric pads for seat and back, are also included. These chairs are used for visitors in the solarium and are also convenient as additional chairs for visitors in the wards. The metal folding chairs possess the advantage, too, of not occupying valuable space when they are not in use.

A comfortable Windsor chair is used as a bedside chair in the wards. It is finished in a medium walnut tone.

Six Color Schemes in Private Pavilions

The remaining furniture is of reed in natural color, wrapped with green and yellow French cane. Cushions are of the same yellow fabric as that used on the aluminum chairs. The reed pieces consist of four easy chairs, a desk, one small bookcase, one fernery, a rectangular taboret with waterproof hard fiber top and four round taborets. This equipment is designed to meet the requirements of twenty-nine beds, leaving ample space for wheel chairs.

In decorating and furnishing private pavilion rooms, it was necessary to recognize the fact that it is impossible to create in a hospital room the characteristics of a home bedroom, because of the necessity of conforming to certain essential hospital requirements. For example, rugs must be cleaned outside the room, thus preventing the use of room size rugs. The bed must be so placed as to assure proper service. The mattress must be abnormally high from the floor, thus throwing all other furniture out of proportion. In view of these limitations, it was decided to develop a scheme of furnishings simple in character and to depend on color harmony and fabrics to create an atmosphere of warmth and richness, rather than to strive for

a result that experience has proved is unobtainable in hospital rooms.

Different color schemes are used in the six private pavilions. These may well be carefully studied and their variety in color treatment adapted to similar accommodations in other institutions. These different plans are accomplished by changing the wall color, drapery and slip cover color and also by using two schemes of furniture and two colors of rugs. Washable wallpaper is used in every case and the trim throughout is a brown stained cherry. Floors are of oak parquet in a dark walnut color. The six color schemes are as follows:

Scheme A — Walls, grey blue; curtains, pink linen with 1½-inch white linen borders set in; slip covers, pink linen piped with white linen at seams; furniture, cherry stained brown with black drawer pulls; rugs, henna brown.

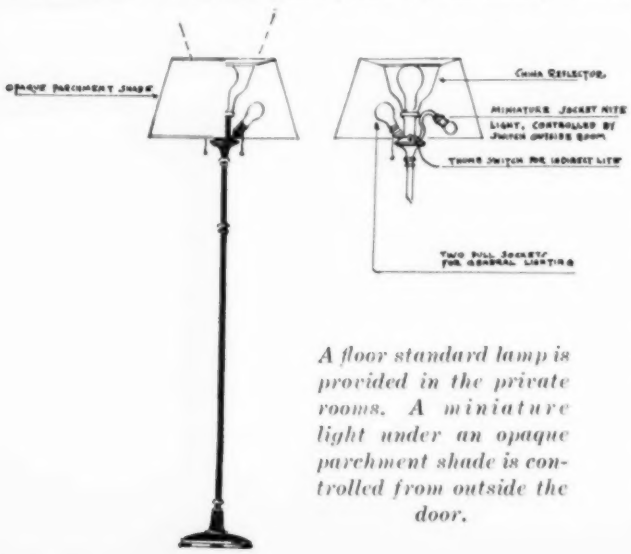
Scheme B—Walls, light greenish grey; curtains, self-tone figured tan linen with binding of reddish brown; slip covers, same linen piped with reddish brown at seams; furniture, cherry stained brown; rugs, henna brown.

Scheme C—Walls, green; curtains, pale yellow linen with red and white figured linen border; slip covers, same linen piped with red at seams; furniture, cherry stained brown; rugs, green.

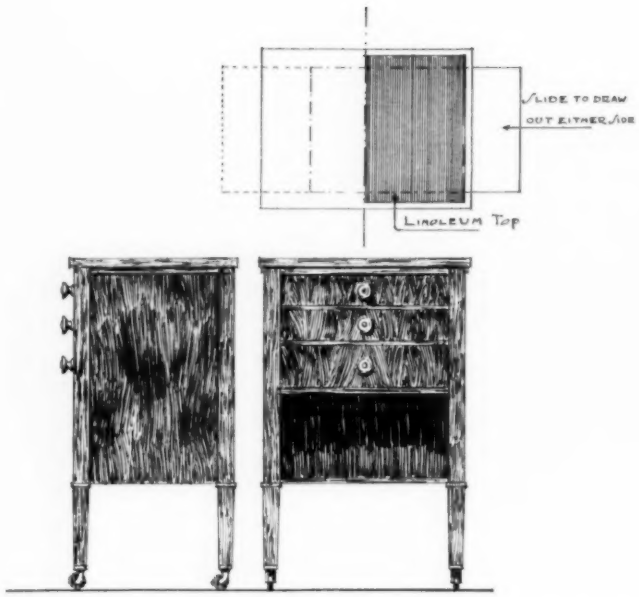
Scheme D—Walls, pinkish tan; curtains, patterned linen in various shades of red, brown and tan with borders to match lighter color; slip covers, same linen piped in same color as curtain border; furniture, dark green with white drawer pulls; rugs, henna brown.

Scheme E—Walls, color and texture of natural linen; curtains, patterned linen in tones of light green, white and yellow edged with yellow; slip covers, same linen piped with yellow; furniture, dark green; rugs, green.

Scheme F—Walls, pale yellow; curtains, white linen with red and white patterned border; slip covers, same linen piped with red at seams; furniture, dark green; rugs, green.



A floor standard lamp is provided in the private rooms. A miniature light under an opaque parchment shade is controlled from outside the door.



The bedside table used in the private rooms is made of wood. The top is covered with linoleum, and underneath the top there is a sliding shelf.

With color schemes clearly defined, the matter of furnishing can next be considered. Beds are painted to harmonize with the other furniture in the rooms. Beds painted to match the wood furniture are not grained. This obviates excessive refinishing cost.

No Fixed Lighting in Private Rooms

The over-bed table, of the same design as those in the wards, is finished to match the bed with inlaid linoleum top of the same color as the finish of the furniture. The bedside table is wood with a sliding shelf under the top. An inlaid linoleum top is supplied as on the over-bed table.

There is a wood dresser with a separate hanging mirror, two armless chairs of Provincial Empire design and an easy chair and ottoman. This chair has a wood frame and spring upholstered seat with a spring unit hair cushion over the springs and a spring unit and down pillow in the back. The back is adjustable to four positions, and the frame and cushions are entirely enveloped with a slip cover.

An easy chair table and a three-fold screen complete the furniture. The table is without a stretcher running its full length, but has a top framed on three sides. Its length permits it to pass over the patient's knees when sitting in the chair, and it is wide enough to pass over the arms of the chair. It is fitted with casters and when not in use stands alongside the easy chair as a side table. The wood screen has panels of white checkered basket weave

cotton cloth, the same as that used for the bedspreads.

There is no fixed lighting in the bedrooms. In lieu of this, a floor standard lamp is provided, and the room is wired with a switch outside the door and another one inside. A miniature light under an opaque parchment shade is controlled from outside the door. The indirect light in the china reflector and the other two lights under the shade are controlled from the switch inside the door and also by pull chains and a thumb switch. A china reflector is used because this material withstands all disinfectant solutions.

Room Furnishings Cost $280

An interesting feature in the lighting equipment is the bedside lamp with its sixteen-inch tubular shaft and eighteen-inch sliding arm adjustable at the shaft end, with a ball and socket adjustment at the lamp end and fitted with a six-inch parabolic shade. The lamp extends vertically to thirty-three inches and horizontally to nineteen inches. Its flat base is eight inches in diameter. Both base and shade are finished in dull black and other parts of the fixture are in chromium. This lamp can be adjusted for the convenience of the patient whether he is lying flat or sitting up.

Other important furnishings are small chenille rugs of plain field with a band border of darker tone, and grey-white Venetian blinds at all windows. Curtains hang to the floor from an exposed wooden pole fitted with wooden rings. All windows are equipped with roller shade brackets. Light-proof shades are kept in storage for use when patients require them.

These rooms were furnished completely, as described, at a cost of approximately $280 each.

Finally, let us inspect a typical student nurse's bedroom in the residence of the New York Hospital school of nursing. Here we see clearly what can be accomplished in these days of low prices toward modernizing the nurses' building. Walls are painted a grey-ivory and floors are covered with two-tone brown linoleum blocks. All furniture is maple finished in a soft light brown. It consists of a thirty-nine-inch bed with turned post, low head and foot boards, a link fabric spring, spring unit mattress, a desk with drawers down one side, a four-drawer chiffonier with hanging mirror, a side chair and an easy chair. The easy chair is similar to that found in the private patient's room except that the back is not adjustable. The cushion construction, however, is the same.

An adjustable reading lamp with a metal shade is part of the furnishings in the student nurses' bedrooms.

The bookcase is 10 inches deep, 30 inches long and 30 inches high, with two shelves and hand holes at the ends to facilitate moving it around the room. This design, used in place of the customary bookrack over the desk, made it possible to reduce the depth of the desk and also to use the top of the bookstand as an end table or night table. An adjustable reading lamp with a metal shade is supplied.

Cushions on the easy chairs are covered with material of a small geometric pattern. The two schemes of upholstery fabric are green and blue. Draperies consist of a pair of unlined sash length curtains of a special sunfast cotton cloth, printed in small floral patterns. Four schemes of drapery fabrics are used, one with yellow predominating in the design, one with blue, another with rose and the fourth with blue and rose. Bedspreads are of sunfast and tubfast cotton cloth in self-tone patterns whose color matches the upholstery fabrics. Rugs are self-tone Wilton carpet of the same coloring as the upholstery fabric but darker in tone.

A special bedside lamp is a feature of the private rooms. The lamp extends vertically to thirty-three inches and horizontally to nineteen inches.

The cost of furnishings complete, as described, is about $125 for each room.

The tour of inspection might be continued into other sections of the New York Hospital. Lounge rooms in the nurses' home, for example, are worthy of study. The same meticulous care and good taste are apparent in recreation rooms for staff and students on the top floors of the building. Sufficient emphasis has been laid on outstanding features of the furnishings to prove that it is possible today for any hospital to present a good "front" without great expense.

Better Local Councils—the Need of the Individual Hospital

The plan described here proposes the extension of local hospital councils in Ohio and provides for a closer relationship between the local, state and national associations. This plan can be extended to the more densely populated geographical sections of the American Hospital Association with great benefit to the hospitals

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NEVER in the history of hospitalization has there been a time when greater need existed for cooperation among hospitals than is the case today. Hospital administrators are confronted with many conflicting ideas regarding the solution of problems with which they are faced. Open discussion of these problems and uniform and concerted action are necessary if the hospital world is to find the proper way out of its present difficulties.

State hospital associations as well as the American Hospital Association are too remote from the individual hospital to be of service in solving the great majority of everyday problems that confront the individual hospital. While the fundamentals of hospitalization are the same throughout the country the immediate needs of individual hospitals differ greatly. In order, therefore, that the local needs may be met it is proposed that there be set up in the larger cities, local hospital councils in which all hospitals within a radius of approximately 100 miles would have membership. These councils would hold regular meetings at least once a month when local problems would be discussed and financial and statistical data interchanged.

I have studied the development of such councils in Ohio. There exists at the present time in Cleveland the first local hospital council to be formed in this country. The Cleveland Hospital Council has been in existence since 1916, and is the most outstanding organization of its type in the country. The Cleveland Hospital Council consists of eighteen voluntary hospitals of Cleveland, all of which are supported in part by the Cleveland Community Fund. The council operates a central purchasing agency which employs nine persons, and a central collection agency which employs fifteen persons. A new corporation, the Hospital Finance Corporation, is now being organized in connection with the Cleveland Hospital Council. Its purpose is to finance hospital accounts on a deferred payment plan.

Hospital councils are found also in Toledo, in Columbus and in Cincinnati. These councils, how-

TABLE I—NUMBER OF GOVERNMENT AND NONGOVERNMENT HOSPITALS IN OHIO IN 1933

Nongovernment	
General	117
Maternity	3
Children's	4
Eye, ear, nose and throat	3
Orthopedic	1
Goiter	1
Nervous and mental	12
Tuberculosis	2
Total	143
Government	
General	28
Nervous and mental	9
Tuberculosis	16
Epileptic	1
Total	54
Total hospitals	197
Related institutions	75
Refused registration by American Medical Association	27
Total all institutions	299

ever, serve only as conferences at which local hospital problems are discussed. They do not have paid executives, nor do they operate any of the special services that exist in Cleveland.

The hospital council plan probably could be developed best in Ohio by dividing the state into four districts. The first district would include the northeast section of Ohio, and the Cleveland Hospital Council would be asked to extend its present services to the hospitals in this area. The second district would be in the northwestern part of the state, with hospital council headquarters in Toledo. The third district would include the central part of the state, with headquarters in Columbus. The fourth district would include the southern part of the state, with headquarters in Cincinnati.

It is proposed that these four local hospital councils be integral parts of the Ohio Hospital Association, which in turn would remain a geographical section of the American Hospital Association. In order that members of the local councils may be tied into the state and national associations, it is proposed that membership in the Ohio Hospital Association be changed from personal to institutional. All ethical, nongovernment hospitals would be admitted to institutional membership. Inasmuch as government units do not permit membership of their agencies in organizations such as the American and Ohio Hospital Associations, it is proposed that there also be a personal membership to which executives of ethical government hospitals would be eligible.

Membership Fees Based on Bed Capacity

Table I shows that there are at the present time 197 hospitals in Ohio. One hundred and forty-three of these are nongovernment hospitals, all of which would be eligible for institutional membership. There are also fifty-four government hospitals, the executives of which would be eligible for personal membership.

Table II shows the division of hospitals according to the four districts proposed. There are sixty nongovernment hospitals in the Cleveland district, twenty-five in the Toledo district, thirty-

TABLE II—THE PROPOSED DIVISION OF NONGOVERNMENT HOSPITALS IN OHIO INTO FOUR LOCAL COUNCIL DISTRICTS

Cleveland District		*Toledo District*		*Columbus District*		*Cincinnati District*	
Akron	4	Bellevue	1	Bellaire	1	Athens	1
Ashland	1	Celina	1	Bellefontaine	1	Chillicothe	1
Ashtabula	1	Defiance	1	Cambridge	2	Cincinnati	10
Barberton	1	Fremont	1	Columbus	12	Dayton	4
Berea	1	Hicksville	1	Greenville	1	Gallipolis	1
Canton	2	Keaton	2	Logan	1	Hamilton	2
Cleveland	21	Lima	2	McConnelsville	1	Hillsboro	1
Conneaut	1	Norwalk	1	Marion	1	Marietta	2
Cortland	1	Perrysburg	2	Martins Ferry	1	Middleton	1
Crestline	1	Port Clinton	1	Mt. Vernon	2	Oxford	1
Cuyahoga Falls	1	Sandusky	2	Newark	1	Portsmouth	2
Dennison	1	Tiffin	1	Piqua	1	Wilmington	1
Dover	1	Toledo	8	Sidney	1		
Elyria	2	Wauseon	1	Springfield	1		
Galion	1			Worthington	1		
Lodi	1			Xenia	1		
Lorain	1			Zanesville	2		
Mansfield	2						
Massillon	1						
Mentor	1						
North Royalton	1						
Oberlin	1						
Salem	2						
Shelby	1						
South Euclid	1						
Steubenville	2						
Warren	2						
Wooster	2						
Youngstown	2						
Total	60		25		31		27

Bed Capacity of Hospitals

Beds	*Cleveland District*	*Toledo District*	*Columbus District*	*Cincinnati District*
50 or less	22 hospitals	15 hospitals	20 hospitals	9 hospitals
51-100	14 hospitals	6 hospitals	4 hospitals	7 hospitals
101-150	12 hospitals	2 hospitals	4 hospitals	1 hospital
151-200	3 hospitals	0 hospitals	0 hospitals	3 hospitals
201-250	4 hospitals	1 hospital	2 hospitals	3 hospitals
251 or more	5 hospitals	1 hospital	1 hospital	4 hospitals

TABLE III—THE PROPOSED MEMBERSHIP FEES

Size of Hospital	*Number of Delegates*	*Fees*	*A. H. A. Share*	*O. H. A. Share*	*Local Council Share*
Institutional membership:					
50 or less beds	1	$ 25.00	$10.00	$ 7.50	$ 7.50
51 to 100 beds	2	50.00	20.00	15.00	15.00
101 to 150 beds	3	75.00	30.00	22.50	22.50
151 to 200 beds	4	100.00	40.00	30.00	30.00
201 to 250 beds	5	125.00	50.00	37.50	37.50
251 or more beds	6	150.00	60.00	45.00	45.00
Associate membership	1	20.00	10.00	10.00	.....
Subscribing membership	1	10.00	10.00	.....	.....
Personal membership	1	15.00	5.00	5.00	5.00

Comparison of Present Fees and Proposed Fees

	Present Fees			*Proposed Fees*			
	Total	*A. H. A. Share*	*O. H. A. Share*	*Total*	*A. H. A. Share*	*O. H. A. Share*	*Council Share*
Institutional membership:							
50 or less beds	$10.00	$10.00	.....	$ 25.00	$10.00	$ 7.50	$ 7.50
51 to 100 beds	10.00	10.00	.....	50.00	20.00	15.00	15.00
101 to 150 beds	25.00	25.00	.....	75.00	30.00	22.50	22.50
151 to 200 beds	25.00	25.00	.....	100.00	40.00	30.00	30.00
201 to 250 beds	25.00	25.00	.....	125.00	50.00	37.50	37.50
251 or more beds	50.00	50.00	.....	150.00	60.00	45.00	45.00
Associate membership	10.00	10.00	.....	20.00	10.00	10.00	.....
Subscribing membership	10.00	10.00	.....	10.00	10.00	.....	.....
Personal membership:							
Active	10.00	3.00	$7.00	15.00[1]	5.00	5.00	5.00
Associate	5.00	3.00	2.00	.....	.....	.....	.....

[1]Pertains to government hospital executives only.

one in the Columbus district, and twenty-seven in the Cincinnati district. This table also divides these hospitals according to bed capacity.

Table III shows the proposed membership fees. Hospitals would be charged a membership fee based on their bed capacity. The larger hospitals would pay a larger fee, but would in turn be entitled to a larger number of delegates. This table also shows a comparison of the present fees with the proposed fees, and when it is considered that the present personal membership fee would be discontinued, it is obvious that there will not be any great increase in the total amount of the fee.

Institutional Basis Has Merit

Table IV shows the potential membership fees by districts. The Cleveland Hospital Council would have a potential income of $1,200 a year, the Toledo Hospital Council $385 a year, the Columbus Hospital Council $490 a year, and the Cincinnati Hospital Council $632 a year. The state association would have an income of $2,707.50, and the American Hospital Association an income from Ohio of $3,520.

It is felt that the state and national associations will benefit by the institutional basis of membership (excepting government hospitals) as the greatest amount of benefit from the participation in organized hospital service accrues to the hospital rather than to the individual. That most hospitals recognize this is demonstrated by the fact that in Ohio approximately 75 per cent of all personal membership fees are paid by the hospitals rather than by the individual holding personal membership. It is also true that the greatest amount of benefit from participation in hospital associations accrues to the voluntary hospital rather than the government hospital. The voluntary hospital without government support stands to benefit much more by cooperative planning and effort than does the government institution. It is felt, therefore, that the local councils and the national association should be primarily organizations of voluntary hospitals. The benefits of these associations, however, should be extended to government hospitals by the extension of personal membership to their executives.

Hospital trustees have in the past devoted all of their attention to the problems of their individual institutions and have given too little attention to community, state and national hospital problems. Many ill effects have resulted from this, most important of which is the fact that there has been little or no community hospital planning. The trustees have raised funds and built institutions without any regard to the community needs. They have in many instances been responsible for the overdevelopment of nurses' training schools,

out-patient departments and other hospital facilities, generally because they were not acquainted with actual community needs along these lines.

Participation of hospital trustees in the affairs of local hospitals and in state and national associations will aid hospitals in solving many of their present problems. No doubt hospitals would find it less difficult to secure sufficient aid from voluntary and government sources if their trustees were acquainted with the problems of the hospital field as a whole. The plan here described provides for a given number of delegates according to the size of the hospital, and it is proposed that in all hospitals of fifty-one beds or more that one of the delegates shall be the president of the board of trustees.

The services that a local hospital council can render fall into three general classifications:

1. Regular conferences for the discussion of hospital problems, such as, hospital costs; hospital rates and charges; community planning; departmental problems; uniform salaries, and vacation, sick leave and perquisites.

2. Interchange of financial and vital statistics and other data, such as, the development of uniform accounting and record practice so that com-

TABLE IV—THE POTENTIAL MEMBERSHIP FEES BY DISTRICTS

Size of Hospital	*Number of Hospitals*	*Number of Delegates*	*Fees*	*Total Fees*	*Division of Fees*		
					A. H. A.	*O. H. A.*	*Council*
Cleveland district:							
50 or less beds	22	22	$ 25.00	$ 550.00	$ 220.00	$ 165.00	$ 165.00
51-100 beds	14	28	50.00	700.00	280.00	210.00	210.00
101-150 beds	12	36	75.00	900.00	360.00	270.00	270.00
151-200 beds	3	12	100.00	300.00	120.00	90.00	90.00
201-250 beds	4	20	125.00	500.00	200.00	150.00	150.00
251 or more beds	5	30	150.00	750.00	300.00	225.00	225.00
Total	60	148		$3,700.00	$1,480.00	$1,110.00	$1,110.00
Personal Members	18	18	$ 15.00	$ 270.00	$ 90.00	$ 90.00	$ 90.00
Grand Total	78	166		$3,970.00	$1,570.00	$1,200.00	$1,200.00
Toledo district:							
50 or less beds	15	15	$ 25.00	$ 375.00	$ 150.00	$ 112.50	$ 112.50
51-100 beds	6	12	50.00	300.00	120.00	90.00	90.00
101-150 beds	2	6	75.00	150.00	60.00	45.00	45.00
151-200 beds	0	0	100.00				
201-250 beds	1	5	125.00	125.00	50.00	37.50	37.50
251 or more beds	1	6	150.00	150.00	60.00	45.00	45.00
Total	25	44		$1,100.00	$ 440.00	$ 330.00	$ 330.00
Personal Members	11	11	$ 15.00	$ 165.00	$ 55.00	$ 55.00	$ 55 00
Grand Total	36	55		$1,265.00	$ 495.00	$ 385.00	$ 385.00
Columbus district:							
50 or less beds	20	20	$ 25.00	$ 500.00	$ 200.00	$ 150.00	$ 150.00
51-100 beds	4	8	50.00	200.00	80.00	60.00	60.00
101-150 beds	4	12	75.00	300.00	120.00	90.00	90.00
151-200 beds	0	0	100.00				
201-250 beds	2	10	125.00	250.00	100.00	75.00	75.00
251 or more beds	1	6	150.00	150.00	60.00	45.00	45.00
Total	31	56		$1,400.00	$ 560.00	$ 420.00	$ 420.00
Personal Members	14	14	$ 15.00	$ 210.00	$ 70.00	$ 70 00	$ 70.00
Grand Total	45	70		$1,610.00	$ 630.00	$ 490.00	$ 490.00
Cincinnati district:							
50 or less beds	9	9	$ 25.00	$ 225.00	$ 90.00	$ 67.50	$ 67.50
51-100 beds	7	14	50.00	350.00	140.00	105.00	105.00
101-150 beds	1	3	75.00	75.00	30.00	22.50	22.50
151-200 beds	3	12	100.00	300.00	120.00	90.00	90.00
201-250 beds	3	15	125.00	375.00	150.00	112.50	112.50
251 or more beds	4	24	150.00	600.00	240.00	180.00	180.00
Total	27	77		$1,925.00	$ 770.00	$ 577.50	$ 577.50
Personal Members	11	11	$ 15.00	$ 165.00	$ 55.00	$ 55.00	$ 55.00
Grand Total	38	88		$2,090.00	$ 825.00	$ 632.50	$ 632.50
Recapitulation—State of Ohio							
50 or less beds	66	66	$ 25.00	$1,650.00	$ 660.00	$ 495.00	$ 495.00
51-100 beds	31	62	50.00	1,550.00	620.00	465.00	465.00
101-150 beds	19	57	75.00	1,425.00	570.00	427.50	427.50
151-200 beds	6	24	100.00	600.00	240.00	180.00	180.00
201-250 beds	10	50	125.00	1,250.00	500.00	375.00	375.00
251 or more beds	11	66	150.00	1,650.00	660.00	495.00	495.00
Total	143	325		$8,125.00	$3,250.00	$2,437.50	$2,437.50
Personal Members	54	54	$ 15.00	$ 810.00	$ 270.00	$ 270.00	$ 270.00
Grand Total	197	389		$8,935.00	$3,520.00	$2,707.50	$2,707.50

parable financial and statistical data may be exchanged and compared.

3. Organized cooperative services, such as a central purchasing bureau; a central collection bureau; a central bureau for the investigation of pay and part-pay cases; a central bureau for the development of comparable financial and statistical data; a central bureau for the financing of hospital accounts on the deferred payment basis; a central bureau for the handling of group hospitalization; a central bureau for the raising of funds for the support of free and part-pay hospital service, and for capital expenditures; a cooperative committee on community hospital planning; a central committee for the handling of community hospital publicity, and a central committee to aid in the securing of tax support for service to indigents.

Lack of Funds Has Handicapped Association

It is obvious that the income from membership fees will not be sufficient to support the local councils. It is suggested that until such a time as the fees can be increased to pay for the service that the local councils attempt to secure aid from community funds or other sources to support the program herein outlined.

The services rendered by the Ohio Hospital Association always have been hampered by inadequate funds. I have been secretary of this association for the past five years. During this period the association's officers have desired to carry out many projects which would be of great benefit to the hospitals of the state, but with the limited funds available (about $700 a year) it has been impossible to start any of these projects. Under the plan here proposed the income of the state association would be in the neighborhood of $2,500 a year. The carrying out of any worthwhile program will require the services of a full-time executive secretary; but before the Ohio Hospital Association can consider the appointment of a full-time secretary it should have an assured income of at least $7,500 a year. It is proposed that the local councils make efforts to raise approximately $5,000 a year for a five-year period. This $5,000 when added to the income from membership fees would give the state association sufficient income to carry out a really effective program, and if this were done the state association would have no difficulty in continuing to raise sufficient income for its support after the five-year period had expired.

The efforts of the state association should be concentrated along the following lines:

1. Coordination of the activities of local hospital councils.

2. Development of an effective regular publicity service which would acquaint the people of the state with hospital service and the need of hospital support.

3. Cooperation with the industrial commission as regards services to industrial accident cases.

4. Cooperation with the state board of health and the bureau of hospitals.

5. Cooperation with the state board of welfare. Securing cost for services rendered to crippled children (wards of the state department of welfare).

6. Securing payment from motor vehicle funds for services rendered to indigent victims of motor vehicle accidents.

7. Cooperation with the state board of nurse examiners.

8. Cooperation with the state medical association.

9. Cooperation with the state nursing association.

10. Securing state aid for services to indigent cases.

11. Examination of all proposed legislation which might affect hospitals.

The services rendered by the American Hospital Association would be similar to the services of the state association except that they would be national in scope. The national association would give special attention to problems that affect all hospitals of the country rather than to the individual problems of institutions in given localities.

Would Develop Interest in Associations

One of the problems of the state and national associations has been that they are not close enough to the everyday problems of hospitals to arouse active interest on the part of individual hospitals. Most hospital executives attend a state and a national meeting once a year. During the rest of the year they give little or no consideration to the state or national associations. This probably is the reason that both the state and national associations have found it difficult to secure financial support from the hospitals. The average hospital is not aware of the benefits it constantly derives as a result of state and national association projects. The plan proposed here would develop interest in local, state and national associations, and should create a greater feeling of actual participation in cooperative effort than now exists. This should in turn make it easier for the state and national associations to secure financial support in the future.[1]

[1]Read at the meeting of the Ohio Hospital Association, Columbus, May 2-4.

Remodeling the Hospital to Meet Today's Requirements

By H. ELDRIDGE HANNAFORD

Samuel Hannaford & Sons, Architects, Cincinnati

There are numerous ways in which the hospital can profitably improve existing buildings. De luxe suites can be converted into two-bed private rooms or adjoining private rooms into wards. Floors now closed can be altered to accommodate tuberculous or chronic disease patients at low rates, which would bring the general hospital increased revenue

WORLD economic conditions and a lack of funds have forced many hospitals to postpone new construction. The logical procedure, therefore, is to plan alterations, replacements and modernization of present plants, and the wise spending of available funds.

The hospital executive should set up a definite yardstick by means of which contemplated alterations may be judged and either justified or rejected. The following is submitted as such a yardstick:

Will the proposed change benefit the patient by improving nursing service; by improving medical service; by improving aseptic technique, and by contributing to the patient's comfort and peace of mind.

Will it justify itself financially by reducing operating and maintenance costs, and by securing more favorable insurance rates.

Will it benefit the hospital by attracting more desirable patients; by securing better support from the medical profession of the community, and by building up good will.

Let us first consider desirable changes in nonfireproof buildings. Of course there should not be any nonfireproof hospitals, but nevertheless they do exist and can be benefited by the following alterations.

If the exterior walls are of wood construction with wood siding or weatherboard wall facing (to assume the worst possible case) they should be faced with a brick or stone veneer or at least covered with two inches of cement stucco on metal lath. This will considerably reduce the outside fire hazard and will also eliminate the cost of further painting of the wood siding. A better insulated wall will result which will be reflected in fuel savings.

If the exterior walls are already of masonry it would be well to eliminate the wood windows and exterior wood doors and replace them with windows and doors of metal or metal covered wood.

Wood appendages such as cornices, porches, steps and the like should be eliminated and replaced with others made of incombustible materials.

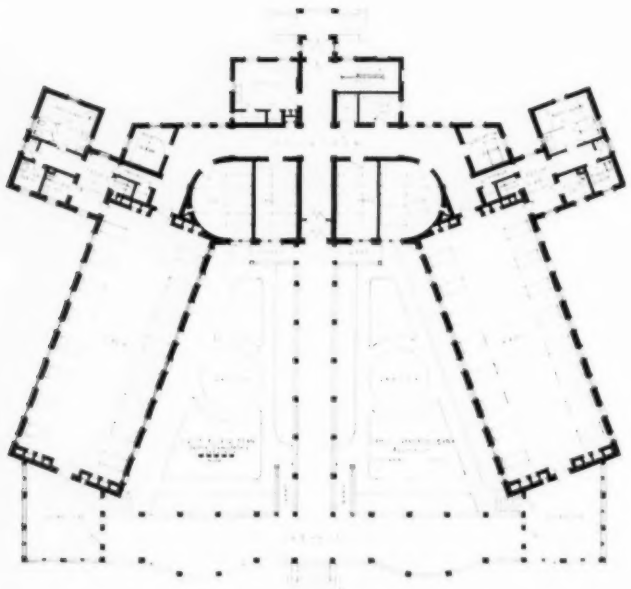
Wood shingle roofs should be replaced with slate, tile or some similar incombustible material or they should be covered with asbestos or some other noninflammable composition shingle applied over the old wood shingles.

Some Fire Protection Measures

In congested districts where the fire risk from adjoining buildings is great, it would be well to consider installing a sprinkler "water curtain" to drench the outside of the building should a fire originate nearby, and thus prevent the hospital catching fire.

Exposed steel work, wood beams, floor joists, wood posts or other structural members of steel, iron or wood should be protected with a one-inch covering of cement plaster on metal lath. This may seem an unnecessary precaution insofar as protecting the metal is concerned, but it must be remembered that, when heated, metal loses its strength rapidly, and will collapse quickly under the superimposed load.

Wood stairs should be replaced with stairs of pressed steel, concrete or some other incombustible material. Steel stairs should be fireproofed with cement plaster on metal lath.



The first floor plan of Ward Building No. 2, Hamilton County Tuberculosis Sanatorium, Cincinnati, before remodeling.

All open shafts or "wells" through the building, such as stair wells, elevator and dumb-waiter shafts, should be enclosed with incombustible enclosures and fireproof doors at the various floor levels. If they are left open, these shafts act as flues in the event of fire and quickly spread flame and smoke through all parts of the hospital. The enclosures should be of masonry, concrete or hollow tile, but where this is not feasible the enclosures may be 2-inch cement plaster partitions constructed of metal channel studs. Even an enclosure of steel partitions and wire glass may be used with material benefit.

Additional inside stairways or outside fire escapes often contribute materially to the safety of the patients in times of emergency.

The boiler room, the main kitchen, the x-ray film storage room, the drug rooms and vacant attic spaces are constant potential fire hazards. The provision of an automatic sprinkler system in these areas should be considered by the hospital. Such a system should be a self-liquidating investment through consequent reduction in insurance premiums. Film storage rooms, however, should be outside of the hospital proper and should be constructed in accordance with the fire underwriters' code.

The following suggested alterations apply with equal force to all classes of construction, both fireproof and nonfireproof.

Large open wards may be improved by subdividing the area into cubicles. Metal and glass partitions may be used for this or one of the systems of rods and curtains may be used. The subdivision of open ward space gives the patient some privacy, and also facilitates the grouping and classification of patients.

Sanitary conditions can be improved, cleaning can be facilitated and maintenance costs reduced by the following procedures.

Wood floors may be replaced with flooring of an impervious type such as tile, terrazzo, rubber tile, mastic tile or sanitary composition. In most cases flooring of this type can be installed over the old flooring. The extra thickness can be taken up at the door openings with new thresholds properly beveled to meet the lower level.

New Paint Works Wonders

In kitchens, pantries, utility rooms, bath and toilet rooms, janitors' closets, treatment rooms, operating rooms, sterilizing rooms and dressing preparation rooms, new wainscots may be provided or old ones extended, using tile, terrazzo, marble or structural glass for this work. Wainscots should finish flush with, or gently round back into, the face of the plaster wall above and should meet the floor with a cove to facilitate cleaning. All exterior and interior corners and angles should be rounded for the same reason.

Wood window stools may be replaced with stools of marble, slate, soapstone or some other impervious material. Molded wood panel doors may give way to flush panel (slab type) doors. All molded wood door or window trim, except in public or office spaces, may be replaced with a plain type of trim.

"Hospital type" hardware should be used on windows and doors.

If walls and ceilings are unpainted or are finished in a flat paint, such surfaces may be repainted with a fine grade of hard drying enamel which will withstand repeated washings. A high gloss finish enamel should be used in utility and general service spaces and an eggshell gloss elsewhere.

The importance of paint both as a protective and rejuvenating medium can hardly be overstressed. Fresh paint and a change in color scheme are always pleasing and create a favorable impression. Sterilizer stands, door frames or other items apt to be damaged in use should be touched up constantly as chipped paint suggests careless management.

Dwarf doors on the corridor sides of door openings to patients' rooms and wards are desirable. They add to the patient's comfort as they permit the room door to be left open without loss of privacy to the patient.

Antiquated plumbing fixtures should be replaced with modern equipment, using the wall hung type of fixture whenever possible so as to facilitate

cleaning under and around the fixtures. Under such items as bathtubs, cases, counters and lockers sanitary bases should be provided to prevent dirt collecting under this equipment and to facilitate cleaning. The open space over the tops of cases, lockers and cabinets should be furred-in so as to prevent the accumulation of dust on the tops of such equipment.

The sterilizing equipment should be brought up-to-date by means of additional appliances or by replacing obsolete equipment. Whenever possible wall hung or, better still, tiled-in equipment should be used. The necessity for making all piping, valves and other working parts accessible for inspection, adjustment, repair or replacement must be borne in mind.

The kitchen should be studied to learn if the service can be bettered by a rearrangement of the equipment. Will the replacement of obsolete items with more efficient equipment be beneficial? Can additional equipment be installed and the amount of kitchen help reduced thereby? Mechanical equipment such as boilers, water heaters, pumps, fans and motors should be checked. Often important operating savings may be made by purchasing modern equipment. The purchase of proper recording equipment such as CO_2 recorders and steam flow meters will help allocate heating costs and check fuel efficiency.

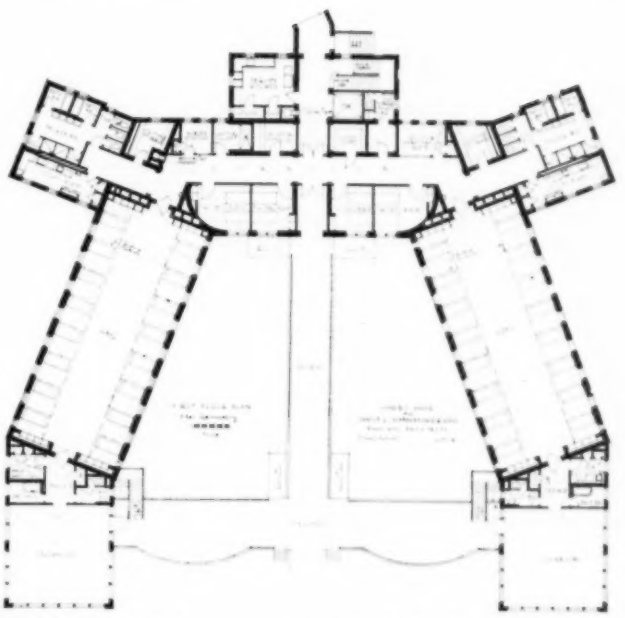
Changes in the Heating Plant

There are several modulation systems on the market which have proved their worth as fuel savers. These systems regulate the pressure on the heating system to adapt it to varying outside temperatures. Automatic damper and draft controls will also save fuel. Automatic stokers and coal handling equipment will increase firing efficiency and also permit the elimination of some of the boiler room crew. The replacement of defective insulation on heating and hot water lines and the insulating of such lines as are bare is advisable and should pay for itself in checking heat losses.

Old leg type radiators should be replaced with wall hung hospital type radiators. This work can be done in the summer or it can be done a room at a time during the heating season.

Air conditioning is extremely valuable and should be considered seriously by the hospital superintendent. If the existing building lends itself to the installation of a central air conditioning plant without necessitating extensive changes in construction, then a central plant is preferable to the individual conditioning units in the various rooms.

Old electric fixtures should be replaced with modern, high efficiency fixtures.



This is the first floor arrangement of Ward Building No. 2 after remodeling. The original layout is shown on the opposite page.

The refurnishing of patients' rooms often proves effective as a modernizing influence. A well furnished and harmoniously decorated room has a pleasing psychologic effect on the patient, which is of definite therapeutic value. Color may be used freely so long as the colors selected are not too vivid. Harmonious contrasts are preferable to a solid matching color scheme. Solariums, day rooms and other rest and recreational spaces may be treated in similar fashion. The main entrance lobby and the general public waiting room are the points of initial contact between the public and the hospital. It is here that the visitor forms his first impression of the hospital and it is important that this first impression be favorable. These spaces should be made attractive by remodeling, refinishing or refurnishing.

It is advisable to use acoustical material on the ceilings of corridors, utility rooms, floor service pantries, solariums, treatment rooms and other noise centers. The type of material selected should be of a type that will withstand repeated cleaning and refinishing without deteriorating.

The value of thermal insulation has been conclusively demonstrated in recent years, from the standpoint of fuel saving and heat economy and from the standpoint of increased comfort of patients and personnel. Roof or attic spaces should be insulated, also the ceilings of the boiler room, the laundry and the kitchen, particularly if rooms or offices are immediately above such heated spaces.

In my opinion the rigid types of insulation, such as cork or fiber board, are preferable to other types.

No piece of equipment dates a building more

definitely than do its elevators. The elevator has been so improved during the past few years that it is almost necessary to modernize any elevator that is more than ten years old, particularly its safety features. Consideration should be given to new elevator enclosures and cabs, new types of control, new signals and new door operation.

Hospitals are finding to their dismay that their de luxe suites and expensive private rooms are not in demand, that persons who formerly used de luxe suites are using cheaper private accommodations, that those who used single rooms are asking for beds in two, three and four-bed wards, and that those who formerly occupied the two, three and four-bed wards are content to take accommodations in larger wards.

Obviously, all the hospitals cannot be scrapped over night and new ones built to meet these conditions. The next best thing is to remodel the hospital to meet the demands of present day patients. I realize, of course, that some buildings will not stand this remodeling, but for the next five years it would pay some hospitals if they could, for instance, take out a partition between two private rooms and make the space into a three or four-bed ward, or if they could change their de luxe suites into two-bed rooms.

There is another possibility for adding revenue to the hospital. Some hospitals have closed entire floors. I think that study should be given to the remodeling of these floors into accommodations for tuberculous or chronic disease patients at an extremely modest rate. This alteration might be made at little expense, and to the great benefit of patients who are able to pay but who now must go to sanatoriums some distance from their homes.

If hospitals would take cases, other than terminal cases, at rates as low as $21 to $30 a week they could increase their revenue as the service cost should be low for these patients. I think a floor should be set aside for reasonably priced convalescent care so that a patient who is on the mend could be moved from the more expensive accommodations to the less expensive accommodations which, strange as it may seem, would probably profit the hospital, as the patient would stay longer in the cheaper accommodations, and would praise the institution when he left.[1]

[1]Paper read at the meeting of the Illinois, Indiana and Wisconsin Hospital Associations, Chicago, May 3 to 5.

Some Pointers on Buying Hospital China

China is an important item in the hospital from many standpoints. Its initial cost is a considerable item, and the hospital budget must provide a substantial sum to replace articles that are broken. It is important that the hospital use china of attractive color and design to tempt the appetite of patients. Consequently care and consideration should be exercised when purchases are being made.

The characteristics of porcelain and vitrified china vary with the composition of the clays and the methods of manufacture, says Etta H. Handy, writing in the *Hotel Monthly*. Porcelain or vitreous ware, fired at comparatively low temperature, is brittle and absorbent. It is therefore not satisfactory for institutional use.

Vitrified china is practically nonabsorbent and has a high luster. It is manufactured from pure, ironfree clays combined with a small amount of felspar and fired at a high temperature during several processes. The glazing mixture is applied prior to the final firing. The term "vitrified" does not guarantee that all vitrified china is of the same quality.

Imported china is fired for luster rather than durability. There is no glaze over the designs in imported china, and therefore the designs will not withstand hard or constant wear.

Heavy china, which is approximately ¼-inch thick, is not desirable for use in institutions because of its weight on trays. The medium weight in either the medium flat rim edge or medium rolled edge, approximately ⅛-inch thick, is adapted for use in most institutions. A new method of treating the rims of plates retains the rolled edge, with its added durability, and at the same time gives the effect of flattening and lowering the plate. This is called the medium weight, flat rim edge plate.

The cheapest decoration is the narrow line treatment, but this design is monotonous. Simple print decorations cost approximately 10 per cent more than the line design. Some prints are more expensive. Decalcomania decoration employs three to sixteen colors and hues. It is more expensive than the line or simple print decorations. Underglaze is preferable to overglaze decoration, as it will not wear off. Gold decoration is always overglaze and is therefore not recommended for institutions.

The trend in recent years is to use more color in china, and to consider the color and design, and the shape and weight of the different items in the individual dishes as fine points of service. Time spent in investigating types, shapes and decorations offered by well known manufacturers yields ample returns in the long run.

Group Nursing Experiment Proves Successful

The annual report of the Mount Sinai Hospital School of Nursing, New York City, indicates that the semiprivate pavilion for patients of moderate means and the group nursing department, which were started more than a year ago, as an experiment, have been highly successful. The service has been popular with the patients, with the patients' families, with the doctors and has been extremely satisfactory to the nurses. It has been possible for the school of nursing to maintain a group of from sixteen to twenty-two nurses daily in connection with the work that has been carried on.

Organizing a Tumor Clinic in the General Hospital*

By HERMAN SMITH, M.D.
Superintendent, Michael Reese Hospital, Chicago

A SEGREGATED group of patients receiving treatment for benign and malignant tumors should, for obvious reasons of both fact and psychology, be called a tumor clinic or group. The descriptive adjective "cancer" should never be utilized.

Consideration of the general question of tumors as they affect the community involves the following factors which must be borne in mind: (1) education of the laity and physicians, (2) treatment of the disease and (3) research into the etiologic, pathologic and therapeutic phases of the disease.

Education of the laity is obviously necessary. It should bring more and more tumor sufferers to apply for treatment earlier in the course of the disease. It should likewise cause more of these sufferers to apply to competent medical persons, and save them from dallying with quacks. Numerous other rather obvious advantages in an educational program for the laity have no place in a discussion of the organization of general hospital tumor clinics. Problems involved in educating physicians will be dealt with in the course of this article.

Tumor Clinics Offer Patients Better Treatment

Treatment of a disease as baffling as malignant tumor, in our present state of incomplete knowledge, requires careful, concentrated and continuous study. This type of treatment is usually carried on best by a compact group under proper leadership. While it is perfectly possible that single great forward steps may be made and have been made by individuals working entirely alone, it is logical that more consistent and ultimately greater progress will be made by organized groups of competent men working in a cooperative manner. Even if great advances are not made by these groups, better treatment will be available to patients in hospitals with organized tumor clinics because the complete knowledge with which these groups will equip themselves must filter through to all their colleagues.

The need for research hardly requires emphasis. Research is obviously so all-important that arguments or explanations concerning its necessity seem superfluous.

The need of public or lay education, the need of familiarity with the best methods of therapy and the need of research are, then, the outstanding reasons for the formation of a tumor clinic in a general hospital.

Staff Members Must Cooperate

Throughout this article it should be remembered that I am discussing tumor clinics in general hospitals for the benefit of administrators of general hospitals. I am not discussing tumor clinics in public, municipal or county hospitals, or in university hospitals with paid medical staffs, but in general hospitals admitting both general ward and private patients, where staff physicians are not on salary but depend upon their private practices for their incomes.

That patients must be given the best of medical care and the benefit of the latest advances in all types of tumor therapy is obvious. This care can be given only by physicians, and ultimately only by physicians working in some sort of harmony and cooperation. It is therefore important in planning a tumor clinic to consider a type of organization which in a general hospital will not cause a breakdown of cooperation between competent physicians.

Certain arguments may be advanced against forming a tumor clinic in a general hospital. One of these arguments is that such a group introduces many varied and frequently difficult administrative problems that not only cause annoyance but consume time. The integration of the clinic into the organization of practically every department of the hospital results in numerous personality and organization conflicts.

Some medico-economic reasons against the formation of a tumor clinic have been suggested. Members of the general hospital staff who are not officially part of the tumor clinic may feel that their colleagues in the clinic, whether they be on

*This article is one of the Hospital Organization Series, under the direction of Dr. Winford H. Smith.

full or part time or on a consultant basis, are obtaining an unfair and undeserved advantage so far as prestige in the community is concerned. Tumors are so widespread in their distribution throughout the human body and form so substantial a portion of practice either in general surgery or in any of its specialties, that most surgeons feel they are competent to care for them as they arise in their particular specialties. Development of a tumor group within the confines of the various surgical specialties can be fraught with many difficulties.

Personnel Is of Prime Importance

We mention the difficulties awaiting the hospital administrator in order that he may avoid some of them and be prepared for others. Constructive planning and full understanding of the situation on the part of every person concerned should be accomplished before the clinic is launched. This is necessary for rapid and smooth progress.

Next let us consider the ways in which the clinic can be organized so that it becomes an integral and harmonious part of the general hospital. The tumor clinic requires, like every other department of the hospital, personnel, equipment and space.

Personnel was intentionally placed first because it is of prime importance. A hospital, regardless of the completeness of its buildings and equipment, is only a pile of bricks unless a competent group of physicians is available. This statement applies even more specifically to a tumor clinic. The trained medical personnel is the clinic. It is true that tools are needed, but brains are the prime essential.

The ideal set-up calls for a full-time director who shall be a graduate physician with experience in tumor work—diagnoses, pathology and treatment insofar as surgery, radium therapy and x-ray therapy are concerned. The director should be able to carry on or to stimulate research. This is, of course, a large order and these attributes can rarely be found in one individual. But I speak of the ideal, and it is not essential that the director possess all these qualifications.

He should, however, have had opportunity to see large numbers of tumor patients under competent supervision. He should have had opportunity to see competent surgery on all types of patients and, preferably, should have had opportunity to do some operating supervision. It is not necessary that the director be a finished surgeon because in his own tumor clinic he may not be called upon to do surgery. He should have had opportunity to observe large numbers of tumor patients treated by x-ray and he should be competent to direct deep x-ray therapy.

He should have had thorough training in microscopic diagnosis of tumors and be competent to make his own diagnoses. He should have had thorough training in the technique of radium therapy and be competent to apply it himself in most instances and to advise the staff regarding its administration in situations involving either major or special surgery which he cannot or does not wish to do.

In the outline of qualifications I have intentionally omitted emanation plant experience because there is a serious question as to the need of an emanation plant in a general hospital tumor clinic. If the director has had this actual experience it is, of course, a decided advantage. But if he has not had the experience and it is decided to install a plant, the services of a physicist trained in the work can be obtained.

In this ideal set-up the director will have as many assistants and technical helpers as the size of the clinic demands and its funds allow.

The problem regarding the personnel of the tumor clinic recruited from the medical staff of the hospital may be divided into two major parts. First, in the case of ward patients, the clinic should be so organized that both patients and clinic personnel derive the maximum benefit. Second, in the case of private patients, the clinic personnel should be enabled to cooperate satisfactorily with staff or nonstaff physicians.

In considering the several possible methods of working out these two personnel problems, let us assume that the hospital staff is divided into departments. It is improbable that a hospital too small to have various specialists on its staff will wish to consider the formation of a tumor clinic.

Which Staff Member Shall Care for the Patient?

General ward patients include out-patients. General ward patients should be out-patients before they are admitted to the ward and usually are out-patients after they have been discharged from the ward. The question to be considered here is which staff member is to care for the patient.

There are two general solutions. Both call for consultation between the director of the clinic and a staff physician of the service to which the patient has been admitted. The first possibility is the assignment of one member from each department —surgery, gynecology, genito-urinary surgery, ophthalmology and others—to care for all tumor patients coming to that department. Under this arrangement the tumor clinic director would consult with only one member in each department upon all general ward patients. The other method provides for the assignment of tumor patients to each member of a department, just as other pa-

tients in the hospital are assigned, subsequent consultations to be held with the director of the tumor clinic.

Differences of opinion exist as to the efficacy of these methods. Advocates of the first, or restricted, method point to the better care the patient may receive as the result of concentration of effort and development of technique. Advocates of the more general method maintain that it gives all the surgeons an opportunity to improve their technique and to learn the newer points of tumor therapy so that more surgeons will be more competent to handle the problem. It is obvious that modifications have to be made in various hospitals because of local factors.

How Consultations Are Handled

I strongly favor the second more general plan of treatment. A general surgeon is not likely to refer his private patients suffering from breast tumors to a brother general surgeon who may happen to be the department's representative for general ward breast tumors. Nor can a gynecologist be expected to refer patients suffering from tumors of the uterus. Because of these practical factors, I believe that ultimately more patients, general ward and private, will receive better and more enlightened care if general ward patients are not concentrated in the hands of a few staff men but are rotated as are other patients, with the understanding that the director of the tumor clinic shall serve as consultant in all cases involving general ward patients.

The second portion of the personnel problem, concerning the care of private patients, is also made up of two phases. The first involves members of the regular or courtesy staff who refer their private patients to the tumor clinic. The second involves nonstaff physicians who refer patients to the tumor clinic for opinions and possible treatment.

In the first instance a staff man sends a private patient to the tumor clinic because he presumably wants the opinion of the director of the clinic. If he wanted the opinion of one of his staff colleagues he would get that type of consultation without referring the patient to the tumor clinic. In this connection, it is plain that even if only department representatives were to care for all general ward tumor patients, it would be impossible to force the representatives into consultations upon private patients.

When nonstaff physicians send private patients to the tumor clinic for consultation or treatment further complications arise. These men may send patients because they want only consultation with the director of the clinic or because they want joint opinions of the director and some particular staff man or men. The clinic should be so organized that the nonstaff physician may avail himself of either of these two types of consultation—consultation with the director alone or consultation affording the combined opinions of the director and any other staff man or men whom the nonstaff physician may desire to call in on the case for consultation.

There may also be instances when a nonstaff referring physician wants the joint opinion of the director and any nonspecified staff man, or when the director needs the help of a staff man in arriving at a conclusion. In both instances I believe it is essential to call in consultation in rotation all competent members of each department rather than to limit the consultations to the department representatives selected for general ward patients. Consultants on private patients are naturally entitled to a fee for their services and difficulties will ensue if these consultations are monopolized by a few. Furthermore, if any staff man may be called in consultation upon private patients, it is rather illogical to limit all the general ward training opportunities to a few surgeons.

In addition to these various problems of treating both general ward and private patients efficiently, there is still another complication. How shall the private patient who comes into the tumor clinic unreferred by a physician be given care? Tumor clinics in general hospitals are part of the community medical equipment and as such the community is entitled to use them, but I believe these clinics will serve their best purpose if they treat private patients only when they are referred by physicians. If private patients who do not have physicians apply to the tumor clinic they should be assigned to staff physicians in regular order of rotation as are any private patients applying to the hospital without having been referred by a physician.

Some Minimum Equipment Requirements

Because of the conditions of general medical practice, I believe it will be found most satisfactory in general hospital tumor clinics to have each department appoint a representative to a tumor clinic committee, in addition to having the director of the clinic consult with all the men in each department on general ward patients. The functions of this committee, consisting of the department representatives, the pathologist, the roentgenologist and the director of the clinic, should be consideration of research and educational programs, ironing out of administrative difficulties and presentation of the scientific accomplishments and problems of the clinic to the entire hospital staff.

The American College of Surgeons[1] states that the minimum equipment of a tumor clinic should include at least 200 milligrams of radium in the form of salt or an equivalent amount of emanation. The question of larger quantities of radium up to 4 grams in the form of radium bombs is to be considered by those hospitals financially able to set up an ideal clinic.[2] The need or desirability of these bombs is somewhat mooted and I do not have the scientific equipment to entitle me to express an authoritative opinion.

Adequate Space Must Be Available

One deep x-ray therapy machine of a minimum capacity of 200 kilovolts is a necessity. Machines of much larger capacity are advocated by some. Here again I shall not venture an opinion. Photographic apparatus is needed for visual records of the results of many types of treatment. Whether or not a radium emanation plant is needed is a purely technical question to be decided between the director of the clinic and the staff before the clinic is established.

It is taken for granted that any hospital contemplating a tumor clinic possesses all the ordinary surgical and medical diagnostic apparatus needed to operate a general hospital efficiently.

The hospital administration should understand that a successful tumor clinic makes many legitimate demands for space. There must be offices for the director and for his assistants and secretary, a waiting room for patients, a sitting room for ambulatory patients, a dark room for nose and throat examination and transilluminations and a treatment room for inserting radium into body cavities and obtaining biopsy specimens. Space must be provided for preparing radium containers and molds and masks for external radium applications and for application of these external appliances. In addition, there must be space for photography, for the radium safe, for the radium bomb and for preparation and microscopic examination of removed tissues.

Many of these spaces can be combined. It is possible to start with small quarters, performing two, three or four procedures in one space. As the work increases each procedure will need separate space and even if small quarters are assigned at first, the expansion must be accommodated when it becomes a necessity.

A separate waiting room is desirable because of the unsightly appearance of patients suffering from facial and head tumors. These patients frequently must wait while they are undergoing treatment.

The radium safe should be kept apart from the rest of the department because of the danger of subjecting the personnel to exposure to the rays. A basement space is usually best suited for this.

The radium bomb and the room containing it are special problems in themselves and should be the subject of a separate article for the comparatively few persons interested in this type of equipment.

Space for tissue preparation need not be provided if a tie-up can be established, as it should be, between the pathologist and the tumor clinic. Specimens can be sectioned and prepared in the pathologic laboratory. The finished specimens can then be sent to the director of the tumor clinic for examination or duplicate specimens of special cases may be prepared.

Comparatively little discussion has been given to equipment and space. These need only to be briefly outlined and the essentials noted. Considerable space has been given to the philosophy of the clinic and to the personnel, because it is believed that these two are the important aspects of the problem. If a competent director is obtained, problems of equipment and space will be worked out by him and no set rules can be established.

How to Organize a Study Group

Competent, well trained directors are scarce. Personnel and equipment of a complete tumor clinic are expensive. Because of these two facts, many hospitals may find it impossible to establish complete clinics. The only compromise to be made, so far as a director is concerned, is, I believe, in the amount of time the director gives to the clinic. No real tumor clinic can be maintained without a competent, well trained physician available to give a definite portion of his time to the work. This physician must be able to advise concerning the type of lesion best suited for surgery, radium or x-ray therapy and the type or amount of each to be utilized. I do not believe it possible for an x-ray therapist or a dermatologist familiar with x-ray and radium in his specialty, or a gynecologist familiar with x-ray and radium in his specialty, or a combination of these men, to develop a real tumor clinic. Their outlook is too confined and their experience in the general field of tumor diagnosis and therapy is too limited.

If a fully trained director cannot be obtained, a hospital should not make the large investment required to purchase the necessary minimum equipment. If there is a definite desire on the part of a hospital's medical staff to improve their tumor

[1] Organization of Service for the Diagnosis and Treatment of Cancer. A Minimum Standard. American College of Surgeons, June, 1931.

[2] One of the best known authorities on radium treatment expresses the opinion that the radium bomb is not the best way to use radium. He favors the provision of "an adequate amount of radium in an emanation plant" for the following reasons: "Operation of a radon plant is not very expensive and offers a much greater possibility for development of methods than does the solid salt of radium in fixed containers. It also involves very much less insurance and much greater protection for those using the radium." There are others who hold this view.

therapy, I believe the staff members should organize a tumor committee or study group consisting of representatives of each department to work up a portion of the general ward and out-patient tumor material, leaving a sufficient number of patients outside of this group to give the remainder of the staff experience in this type of work.

The study group should include the pathologist and the roentgenologist. It should have at its disposal a minimum amount of radium or funds to purchase radon tubes to carry on an ordinary amount of radium therapy. The interest of the staff in general and the members of the study group in particular will be quickly shown by the number of private patients given radium or x-ray therapy. These, and not the number of general ward patients treated, should be the index by which additional purchases of radium or stronger x-ray machines should be made, unless the department is well endowed.

Tumor therapy is such a vast and important field that every hospital should attempt to build up organized groups for tumor study within the limits of its resources. It is obvious that every group cannot make major advances, but the community in general would be much better served if only a fair majority of all the advances that are made in tumor therapy were constantly available to them.

How to Prevent Rusty Water in the Hot Water Pipes

The "red water" nuisance, caused by the corrosion of hot water pipe lines, is something that should be eliminated in the hospital. It is extremely aggravating both to the personnel and to the patients for rusty water to burst forth when hot water faucets are opened. Where this condition prevails in the laundry considerable damage is likely to be done to the clothes. The condition is not difficult to correct, nor does it envolve the expenditure of a large sum of money. In fact, the cost is almost negligible.

The Mellon Institute of Industrial Research has made a careful study of this subject recently. It has been found that almost invariably corrosion is due to the presence of dissolved oxygen in the water. It has also been determined that oxygen corrosion may be accelerated by the presence of large amounts of carbonic acid in the water. This gas is present to some extent in almost every natural water supply. In certain cases other factors, in addition to oxygen, may be the chief source of trouble, and in such cases these factors must be carefully determined and corrected.

There are several methods of correcting this corrosion, according to Edward P. Schinman, chemical engineer, writing in *Hotel Management*.

One method is to use a corrosion resistant material, such as brass or copper, for the tank, pipe and fittings, or specially lined pipe. This method is being used to some extent, but in existing installations suffering from corrosion, other means are usually resorted to.

The most practical method, and one which is being used in many private and government institutions, is the application of small amounts of sodium silicate to the water. This material tends to form a thin film in the pipe lines and tank which serves as a protective coating and prevents the oxygen from coming in contact with the metal.

Regarding the results obtained through the use of the silicate process, the following is quoted from the Manual of Standard Practice for the Power-Laundry Washroom, published by the Laundryowners National Association:

"It has been demonstrated that the color of the water at the faucets has been changed from a yellowish red or even dark brown at times to absolute clearness in about a week's time. Furthermore, weighed test pieces show that actual corrosion is reduced to one-half or less. The treatment is applicable to old, rusty hot water heaters and to almost worn-out hot water pipe lines, as well as to new installations. It is therefore found to be advantageous for laundries where considerable losses are experienced on account of rust staining the clothes."

By using properly designed chemical feeding devices, the sodium silicate can be fed in proper proportion to the amount of water flowing. It is essential that this feed be designed correctly. The cost of sodium silicate is about one cent per pound, and 1/10 to 1/16 of a pound will prove adequate for 1,000 gallons of water.

Principles and Practice of Nursing Need Close Attention

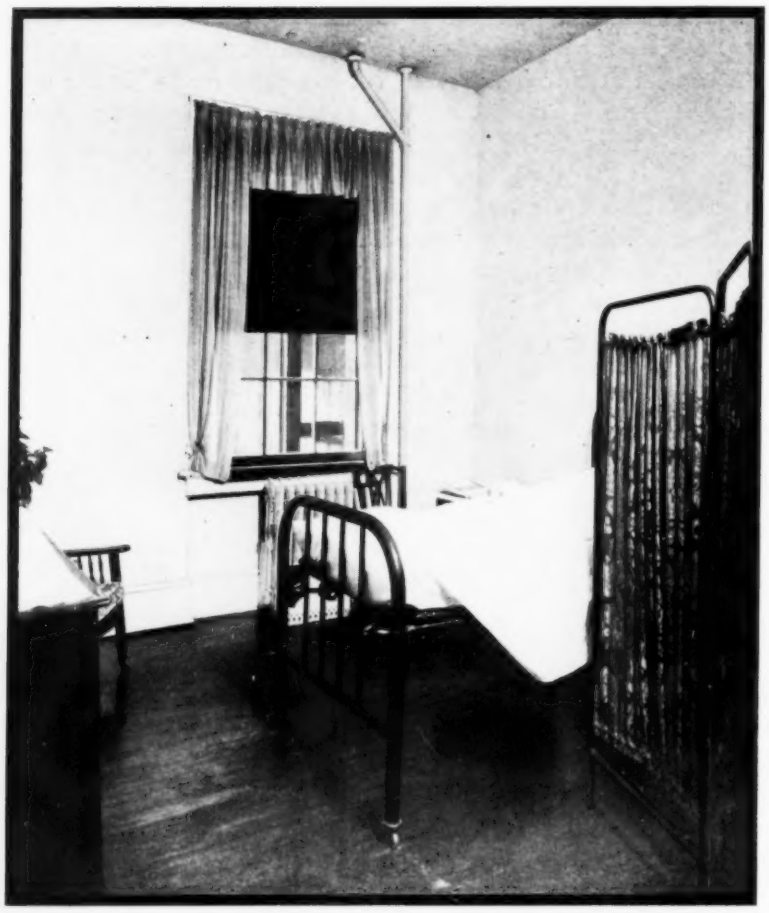
Believing that no other subject is so essential to the making of a nurse, the Committee on the Grading of Nursing Schools has given in its second grading study especial attention to the course "Principles and Practice of Nursing" and to the instructors who teach it.

The better nursing schools, the first grading report pointed out, do not attempt to teach this important subject in large classes but divide the students into small groups for practice periods. Moreover, the instructor follows the work of each student individually on the wards.

Evidently little attempt has been made by most nursing schools to lighten the load for the instructor who teaches principles and practice of nursing so that she may be free to divide the students into small groups and to follow up their work on the wards, the grading committee finds.

While in a few larger schools, the teaching of this one subject is a full-time occupation, in as many as 12 per cent of the accredited schools the instructor in principles and practice also teaches seven or more other subjects. This does not leave much time for preparation for class presentation of such an important course. Some instructors (9 per cent) do no follow-up teaching on the wards, and others (8 per cent) spend only from one to five hours a week in this essential preparation for good nursing. Half of the instructors, however, find it necessary to spend fourteen or more hours a week in follow-up teaching.

"Every instructor of principles and practice of nursing," according to May Ayres Burgess, "should be selected not merely because she is a 'good practical woman' but because she is a broadminded, well educated, scientifically trained woman, with particular aptitude not only for good nursing but for good teaching."



Old Hospital Undergoes Rejuvenation

By REV. JOHN G. MARTIN

Superintendent, Hospital of St. Barnabas & for Women and Children, Newark, N. J.

The picture on this page shows a private room before remodeling, the one on the opposite page, after remodeling. Soft colors have been introduced. Wooden floors and plaster walls have given way to linoleum; new electric light fixtures have been installed, and also gatch beds with inner spring mattresses. A homelike touch is seen in the window hangings which harmonize with the color scheme.

PRELIMINARY warnings of the impending business cataclysm cut off in its initial stages a new building program planned some five years ago by the Hospital of St. Barnabas and for Women and Children of Newark, N. J.

St. Barnabas had been incorporated in 1867 and its main building was erected in 1884. Obviously the institution was severely handicapped by its age. Nearly two acres of ground in the heart of the city had been added to the hospital property from time to time with the hope that some day the old building with its 135-bed capacity might be replaced with a thoroughly modern layout.

When it became evident several years ago that that was no time to undertake a financing program and that the future was fraught with uncertainty, some other means of carrying on was sought. A program of rehabilitation was adopted as the most satisfactory solution of the problem.

In formulating the rehabilitation program, plans that had already been prepared for a new building were of material assistance.

Careful study of the situation indicated that a little more than $20,000 would be required to modernize the institution to meet satisfactorily the demands made upon it. Repairs were listed in the order of their importance. The first heading comprised necessary repairs, totaling about $9,775. The second group, designated important repairs, approached $7,987. The third list consisted of desirable repairs and amounted to $2,700. The fourth group listed "hopeful" repairs at approximately $8,000. Attention centers first on necessary repairs.

Considering the age of the building, it was not surprising that an objectionable knock in the steam pipes should have developed. Expense involved in eliminating this was placed at $250. A new connection in the water main was essential and this was estimated at approximately $471. Among the more costly items was installation of new elevator doors and locks at $1,902 and of new washbasins and toilets at $1,200. A laundry drying machine at a cost of $1,400 was considered essential and it was decided to purchase a coal stoker for $1,950.

Estimates indicated that expenditure of approximately $20,000 would modernize the hospital thoroughly. Repairs were classified according to their importance in a rehabilitation program which was planned to achieve maximum results at minimum cost

Three utility rooms were to be painted and repaired at $360. The ceiling in the men's ward was to be replaced for $400 and the walls painted and repaired for $100. Medical equipment to be purchased included intensifying screens for the x-ray and a plate changer at a total cost of about $1,000.

It is significant also to study briefly that part of the modernization program falling under important repairs. Three diet kitchens were scheduled for renovation at a cost of $1,026. In fourteen private rooms linoleum was to be supplied on the walls and floors and ceilings were to be painted at a cost of $2,800. Linoleum floors costing $460 each were to be installed in both women's and men's wards. New draperies were estimated at $200, and the expenditure for new beds and furniture at $500. A nurses' call system at $530 was listed as an important item. Two tray carts for $98 and an x-ray stabilizer for $125 were placed in this group. Renewed electric lights, wiring and fixtures for the private corridors were included at $635. The reception room and halls were to be redecorated and supplied with linoleum floors.

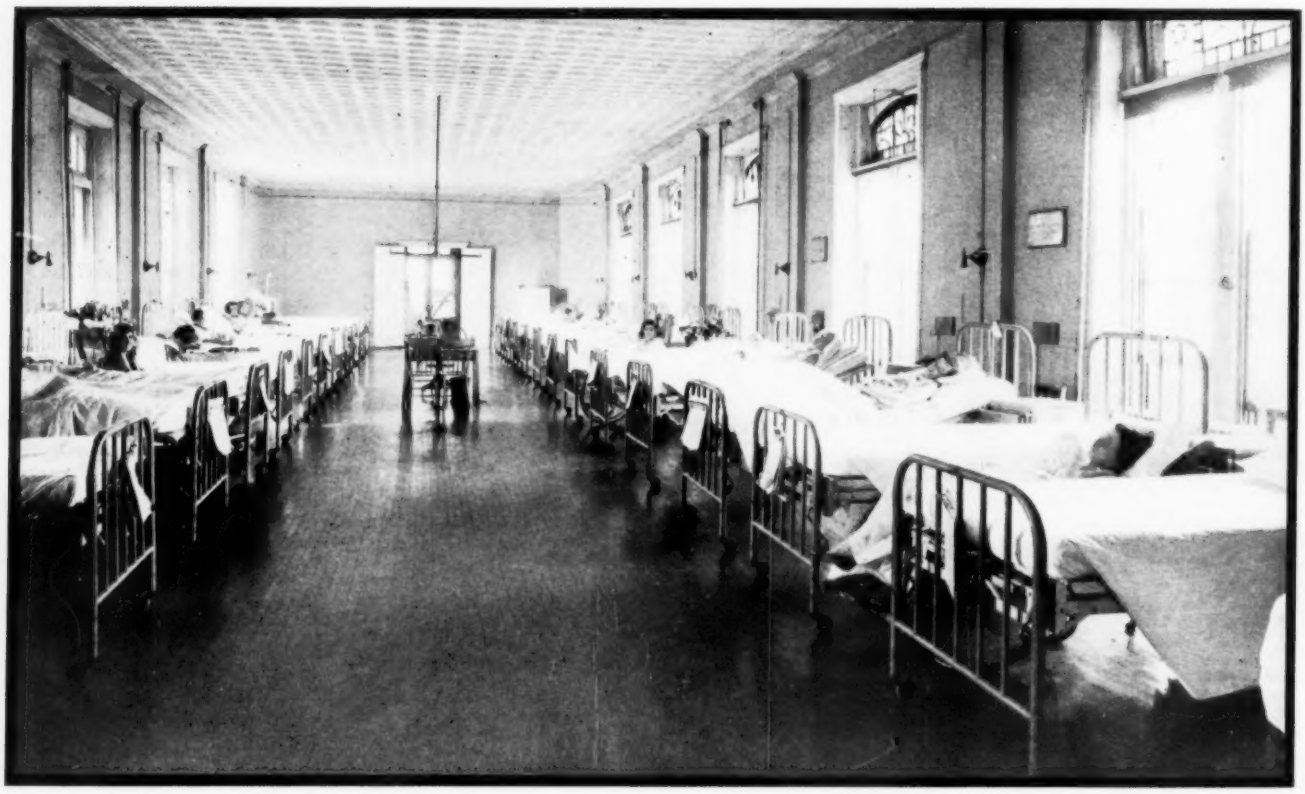
Next, we come to the list of desirable repairs. These were confined exclusively to the operating room and included a new operating light and general alterations totaling $2,700.

Useful repairs embraced new equipment, such as an electro-surgical unit, a visual prostatic electrotome, a new autopsy table, bed screens for women's and men's wards and for the maternity section, a new x-ray machine and an electrocardiograph. This equipment was originally priced at $8,000.

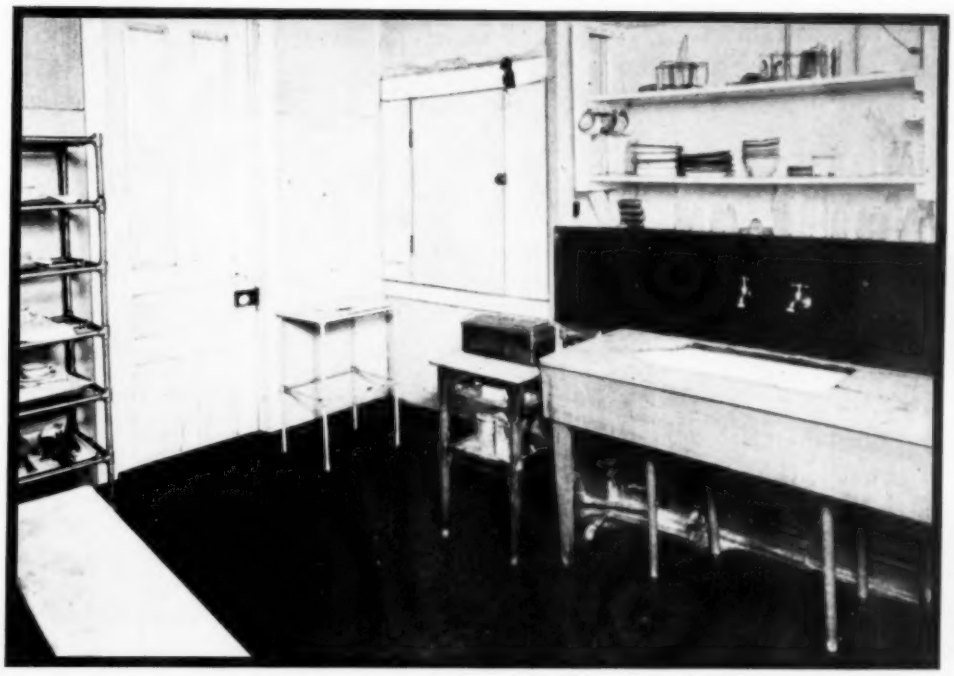
Dividing repairs and new equipment in this manner made it possible to undertake the modernization program step by step, an important factor in these days of uncertain budgets. The list as described was subject to numerous revisions, additions and eliminations made to meet new exigencies. The work has been under way since last December and is gradually nearing completion.

One advantage in accomplishing such renovations under present circumstances is the low cost of labor. Plumbing and electrical work in St. Barnabas, as well as painting and decorating, have been done by skilled workmen who, temporarily unemployed, applied to the hospital for help.

Before the transformation at St. Barnabas, private rooms had wooden floors and walls and ceilings were badly cracked and marred. Today we find on the floors linoleum laid with a cove base. Linoleum in soft shades on the walls determines room color schemes. Some of the private rooms are decorated in soft green, others are done in golden



New color treatment, new flooring and new lighting have transformed the hospital's twenty-five bed wards. The "before" view is shown above, and the "after" view is below. The walls are now finished in light green, and the ceilings are in ivory. Linoleum is used on the floors, a strip of mottled black and white design forming a runner down the center, while the sides are grey.



A diet kitchen, before remodeling (right), and after remodeling (below). The old black slate sinks were replaced with stainless steel sinks. The walls and floors were covered with linoleum, and acoustical treatment applied.

yellow, while a third color scheme is a warm shade of rose. Floors are black and white. New hangings at the windows harmonize with individual room treatment.

Other conspicuous improvements are new electric fixtures and plugs.

Gatch beds have been added and inner spring mattresses supplied in all private and semiprivate accommodations.

A "before and after" view of a typical diet kitchen deserves special study. Before the modernization program went into effect, diet kitchens had worn wooden floors and black slate sinks. In place of the wooden floors are now found cement foundations covered with linoleum. Kitchen walls, too, have been covered with linoleum. The old black sinks have given place to modern sinks of stainless steel. These diet kitchens used to be noisy despite the care exercised to maintain quiet. This handicap has now been overcome with the use of acoustical tile.

The hospital's twenty-five bed wards have likewise undergone startling changes. Walls have been finished in light green and ceilings in ivory. Linoleum now covers the floors, a strip of mottled black and white design running down the center, while a grey tone is used along the sides and under the beds. New lighting has also been introduced into the wards.

Such a rehabilitation program requires the most careful planning since the work must proceed while the institution is fulfilling its usual functions. This means that patients must be moved about with the least possible inconvenience and discomfort and workmen must perform their different duties with as little confusion and disturbance as is possible.

What has been accomplished at St. Barnabas is indicative of the possibilities of rejuvenating other old hospitals at this time and supplying them with needed modern equipment. Despite its being the oldest building in the vicinity, St. Barnabas has enjoyed during recent months the highest rate of occupancy among private patient accommodations.

How One Hospital Reduces Expenses in Its Kitchen

By
ERICH BODE
Chef, Presbyterian Hospital, Chicago

IN ORDER to effect real economy in the kitchen, the chef must be not only a culinary expert so as not to waste food in the cooking, but also a man with a business background so as to understand the ordering of raw food in the right amounts for the number of people he is going to serve.

The chef should strive to maintain the highest standard in the quality of the food he buys and in the preparation of this food. And at the same time he should seek to operate his kitchen as economically as possible.

Economy, however, should not be carried to a degree where the efficiency of service is impaired, the nutritive value of the food served is lowered or variety is sacrificed because of the continued use of low priced foods. Where, then, should the chef look to pare down the cost of food service?

It has been the experience of Presbyterian Hospital that cooperation between the management, the dietitian and the chef is essential in the proper operation of the food department. When making up the menus for the week ahead, the chef consults with the purchasing agent as to the prices of the food selected, and they, with the dietition, try so far as possible to keep to seasonal foods. The chef receives information each day as to the number of persons who are to be served, and from the menu for the day he can estimate the quantities of the various articles of food on the menu that he will require.

When the day's supply of food is delivered to the hospital, the chef inspects it to see that the weight and the quality are in accordance with the order. This inspection is important from the chef's point of view, because it enables him to return any article that is not satisfactory and have it replaced before it is required for preparation. By having only one day's supply of food at a time, it is easier for the chef to control the amount used and in this way eliminate leftover food to a great extent. It is impossible, of course, to eliminate waste entirely because there may be fewer patients or employees than have been provided for, but the leftover food can be used up in some way the same day that it is cooked.

The second cook, the pastry cook and the vegetable cook are thoroughly trained in the matter of calculating the amount of food necessary to supply a given number of persons, and they are as exact about their duties as any bank cashier is in handling money. Each cook is held responsible to the chef for any miscalculations and experience has taught them to estimate quantities quickly.

All the food is prepared in the general kitchen under the direction of the chef (except the quantitative diets), and he is responsible to the management for the quality and the preparation. The chef is notified of any complaints from patients or employees, and it is his duty to see that the cause for the complaints is not repeated. The cooked food is sent to the diet kitchen ready to be placed on the trays served by central service, and to the floor kitchens ready to be placed on the trays of those ward patients not on central service. The chef makes the rounds of the various kitchens to make sure that there is sufficient food to supply the trays, and to learn from the supervising nurses if any patient has expressed a desire for a special dish. During the serving of the food in the diet kitchen the second cook prepares the food that needs to be cooked quickly and served at once.

By buying the best quality of food, having cooks who understand the best way of preparing and serving it, and by exact calculation of the amount of food to buy and cook, the Presbyterian Hospital is able to control the cost of food per person. At the end of each day when the costs are added, it is possible to estimate to a penny the cost of the raw food per patient for each meal.[1]

What One Hospital Paid for Food

Some interesting figures on food costs are included in the annual report of St. John's Riverside Hospital, Yonkers, N. Y., for the year ending December 31, 1932. A total of 350,565 meals were served during the year, at a total cost of $51,147.17. St. John's Riverside Hospital has 162 beds.

Following is a summary of the quantities of food required for the year: meats, 49,451 pounds; poultry, 20,270 pounds; fish, 3,670 pounds; butter, 14,102 pounds; eggs, 12,338 dozen; milk, 76,560 quarts, and cream, 3,571 quarts.

The costs were as follows: meats, poultry and fish, $14,634.38; milk, cream and ice cream, $9,397.41; butter and eggs, $7,286.16; fruits and vegetables, $8,513.76; bread and crackers, $2,001.20, and groceries (including all other foods), $9,314.26.

[1]Paper read before the joint meeting of the Illinois, Indiana and Wisconsin Hospital Association, May 3-4.

Combining Medical and Surgical Care of Intestinal Disease Patients*

By J. ARNOLD BARGEN, M.D.
Division of Medicine, The Mayo Clinic, Rochester, Minn.

A MODERN hospital has at least two primary functions—care of the sick and education of physicians and nurses. Both of these functions are best served by careful planning of time, the strictest supervision of nurses, well planned hospital organization and liberal economy of therapeutic materials.

When an organ or system of organs requires special care, that care can best be given by a unit organization. The combined medical and surgical care of patients with disease of the thyroid gland and of those with genito-urinary lesions, and the subsequent reduction in mortality, are brilliant examples of the truth of this dictum. Not only are patients better served, but a unit system should enable a hospital to perform its services more economically. Modern business has taught that departmental organization promotes greater efficiency and less costly service. One wonders why fifty patients with a similar type of disease requiring similar treatment in any one hospital are not grouped in one wing or on one floor. This is rarely done. In many institutions medical and surgical cases are separated, and obstetrical cases are grouped. It would seem wholly logical, then, to carry this division into the special fields.

How an Intestinal Service Functions

A combined medical and surgical cooperative hospital service for patients with intestinal disorders has been found valuable at The Mayo Clinic. This intestinal service has offered patients better and more efficient service and it has reduced mortality. It has been an important factor in increasing knowledge of colonic disease and in developing greater surgical skill. It has trained nurses to be particularly adept in caring for patients with intestinal ailments and it has guarded against unnecessary waste of time and material.

All patients with intestinal disease are assigned rooms on one hospital floor. The floor is divided into medical and surgical sections. All patients are first assigned to rooms on the medical side. If surgery becomes necessary, they are transferred to surgical rooms after their operations. That is, a patient goes from a medical room to the operating room and from there to a surgical room. Patients with intestinal disorders have irregular bowel habits and each room should have a toilet or at least convenient toilet facilities.

Feeding Problem Is Difficult

"Patients with disease above the diaphragm are optimistic and those with disease below the diaphragm are pessimistic," is a saying attributed to Osler. This applies to the majority of patients with intestinal disorders of long standing who often raise many difficulties. One well trained nurse of unusual alertness should act as floor supervisor and be held responsible for the smooth running of the service.

The feeding problem is most difficult. Diets for different diseases vary materially and the preoperative diet is of still another type. Patients with colitis, generally speaking, require a diet rich in calories, high in vitamins and low in residue. Yet individual necessities vary widely. The main requisites of the diet for diverticulitis patients are bulk and smoothness. The preoperative diet is high in calories, is readily assimilated and is designated as "residue-free," indicating that digestion will leave a minimum of residue. Furthermore, many patients with colonic disorders have no appetite or have lapsed into irrational dietary habits. Hence, a well trained dietitian with much individual resource must be employed.

Many patients with colonic disease have rectal malignant growths and are subjected to colostomy. These patients are carefully instructed about the care of their colonic stoma before they leave the hospital. Suitable colostomy belts are provided. This is strictly an individual matter, and whatever apparatus is applied must be simple and must fit well. The dietitian again offers a great service by supplying dietary advice. Such a diet attempts to cause relative constipation, and yet to permit accurate balance from the nutritional standpoint.

*This article is one of The Hospital and the Medical Staff series, designed to ensure better team work in the hospital through a fuller understanding of the interrelated problems of the medical staff and the administration. The first article of the series appeared in the January issue.

Details of a dietary regimen for patients with chronic ulcerative colitis, of the residue-free diet employed before operation and of a diet for use after colostomy have been published elsewhere.[1]

Among patients with intestinal disease are many with varying degrees of obstruction. The vast majority of patients with rectal and colonic carcinomas, diverticulitis, volvulus and mechanical and adhesive lesions present themselves with some obstruction. Decompression and thorough emptying of the colon before operation is a most important therapeutic step. A room for colonic irrigation should therefore be set up. This room should be conveniently placed in the medical section of the floor where patients with colonic disease are collected. In it should be a comfortable table on which the patient may lie, irrigation cans, a toilet and places for sterilization of instruments and for preparing solutions.

The best irrigating material for this purpose is a physiologic solution of sodium chloride. Almost all patients may be allowed to go to the irrigating room. In fact, most patients will prefer to do this rather than to take enemas in their beds. Depending upon the amount of obstruction, a patient is given citrate of magnesia to help empty the intestine and make irrigations less difficult. Irrigations of the colon are given every twelve hours for forty-eight hours. Each irrigation is continued until the water returns clear. Then, by a simple catheter suction apparatus, the colon is dried on the inside for the next twelve hours. Thus the colon is clean and dry before the patient goes to the operating table. During this last twelve-hour preoperative period the patient receives divided doses of camphorated tincture of opium to allay peristalsis. If so much obstruction exists that it seems advisable to irrigate with the patient in the knee-chest position, this also is best accomplished in the irrigating room.

Intraperitoneal vaccine has apparently been of value in reducing postoperative mortality from peritonitis. The vaccine is given in the patient's room under surgically aseptic technique. A tray containing several dulled spinal puncture needles, procaine or other local anesthetic, a hypodermic syringe and needle, epinephrine and all other necessities for a sterile injection of the vaccine should therefore be constantly on hand. So that materials for intraperitoneal vaccine may be readily available, a small room where the necessities of the service are kept has been set aside. In this room are a small sterilizer, the tray that has been described, an ice box containing serums, vaccines and culture mediums, a table for special treatments, shelves, drawers for records and special medicines. This room serves also as a conference room for internists, assistants and surgeons.

Routing patients with intestinal disorders through one central "clearing house" serves many useful purposes. Not only are the patients better served and their preparation carried out more satisfactorily, but the surgeon and the clinician have opportunity to meet frequently and discuss the care of patients. Again, it affords opportunity for the closest postoperative cooperation. Complications are detected early, and since so many patients with colonic disease undergo a series of graded operations, no time is lost in preparation for each successive surgical maneuver.

[1]Bargen, J. A. and Sister M. Victor: Diet in Intestinal Disorders, Jour. Am. Med. Assn., July 18, 1931, pp. 151-153.

Operation on Mosquitoes Yields Serum to Treat Paresis

A surgical operation on mosquitoes, so delicate that it must be performed under the microscope, is the latest step in the treatment of paresis.

The mosquito operation, announced on May 7 by the U. S. Public Health Service, provides a new method of combating one disease with another. It was described as making possible a more efficient and less costly means of helping paresis sufferers by infecting them with malaria, a treatment used successfully for several years to combat this form of mental illness.

Formerly, paresis patients were infected with malaria by allowing them to be bitten by mosquitoes which carried the disease. The malaria has the effect of arresting the progress of paresis by acting on a blood disease that causes it, and statistics show it has cured 35 per cent of cases that were not too far advanced.

The operation on the mosquitoes consists of removing their salivary glands, which are so small that they cannot be seen until magnified at least twenty times. The malaria germs are carried by the mosquitoes in these glands, and surgeons can use the gland contents to give paresis patients "artificial mosquito bites."

The artificial bites are preferable to real ones, because the glands are made into a serum, easier to ship than live mosquitoes, which sometimes die in transit. The live insects were also difficult to handle and sometimes escaped, with consequent danger of spreading malaria.

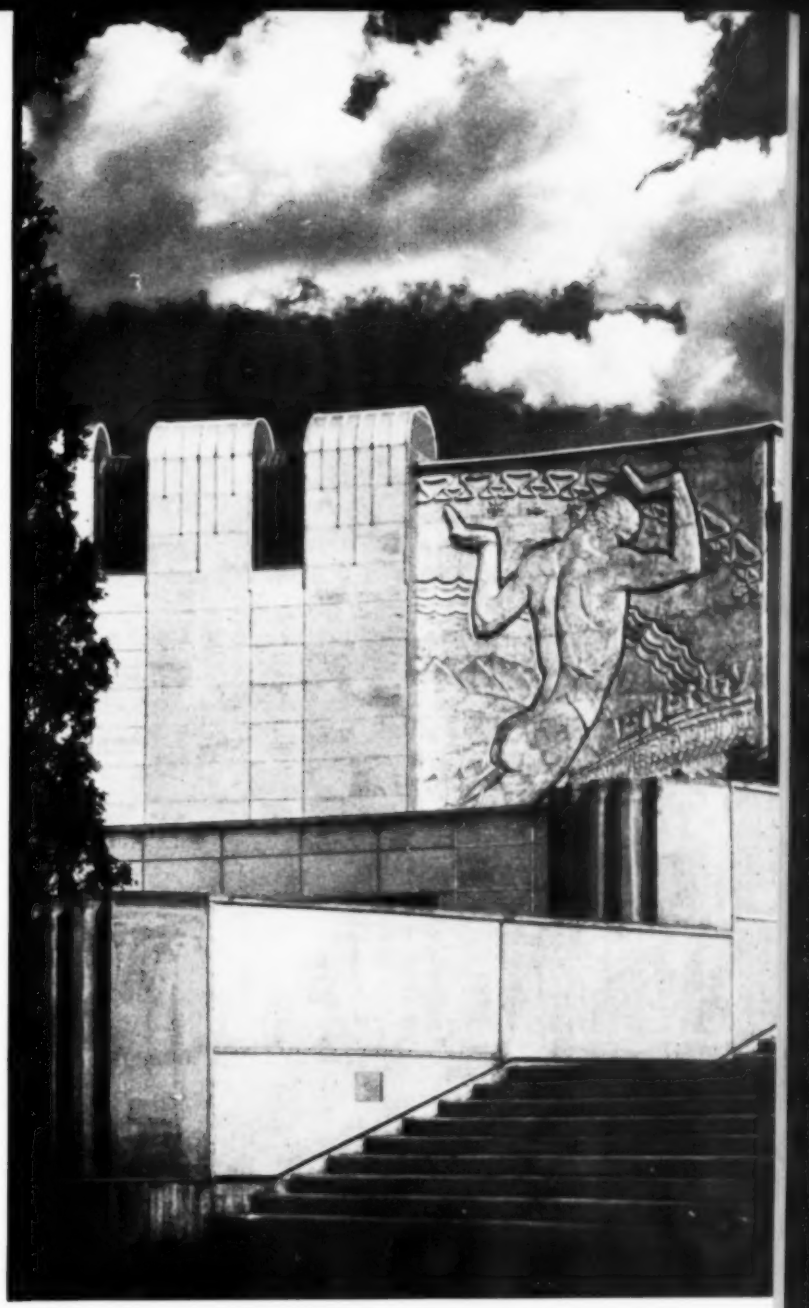
The mosquito operation has been developed by Dr. Bruce Mayne of the Public Health Service laboratories, Columbia, S. C. The mosquitoes used are specially bred under sanitary conditions and then allowed to bite persons who have malaria. The mosquito picks up some malaria germs, and these develop in its salivary glands. Then the mosquito is placed under ether, and operated upon.

The glands are removed and made into a serum, which is injected into the veins of paresis patients. One mosquito's glands contain enough malaria germs to inoculate about twelve paresis cases.

The serum keeps well enough at a temperature of 40 to 50° F. to allow shipment all over the United States.

The vast number of medical and hospital exhibits on display at the Chicago exposition make the Fair, literally, a hospital school. What to see and how to find it is told in this article

A Century of Progress in the Hospital Field



By CHESTER HART, B.Arch.
The MODERN HOSPITAL

A DEFINITE program for visiting A Century of Progress will be found valuable whether the visitor wishes to cover all of the Fair or just those sections pertinent to a particular field.

One method of procedure is to make a general and rapid survey of the exposition by riding on the sightseeing bus within the grounds. In this preliminary viewing the important buildings and groups of buildings will be located in relation to each other. It will be seen that there is a definite grouping of buildings that house allied exhibits.

The Roosevelt Road entrance on the north is a general gateway to the Exposition grounds, and the first visit might well be started from this point. The Hall of Science and General Exhibits Building are close to the Eighteenth Street entrance, and the amusement zone is at the Twenty-third Street entrance. The Transportation Group lies to the south and the Home Planning and Building Group to the north of the Thirty-first Street entrance. On Northerly Island is the Agricultural, Horticultural, Electrical and Social Science group. With this mental diagram of the main groups a visit may be made that will not result in omitting important exhibits and repeatedly seeing displays of lesser value.

Visitors will find the principal medical and hospital exhibits concentrated in the Hall of Science. Many exhibits in other buildings, however, apply both directly and indirectly to this field.

Exhibits in the Hall of Science may be divided into two groups. One consists of exhibits of foreign and American institutions, associations and universities. The other is composed of exhibits of the medical and dental industries. Both industrial and institutional exhibits are designed for the information of the layman as well as of the profes-

sional man. The exhibits were arranged under the direction of Dr. Eben J. Carey, and an advisory committee including Dr. William Allen Pusey as chairman, Dr. Frank Billings (deceased), Dr. Ludvig Hektoen, Dr. Herman L. Kretschmer, Dr. Paul Nicholas Leech, Dr. Arthur Black, Dr. Bert W. Caldwell, Dr. Nelson Mayo, Dr. Julius Stieglitz, Dr. Benjamin H. Orndoff, Dr. A. S. Burdick (deceased), Dr. Morris Fishbein, Dr. C. H. Searle, Dr. Lloyd Arnold, Dr. Franklin Martin, Thomas McMahon, R. A. Whidden, Edwin R. Embree, Julius Riemenschneider, H. C. Christensen, Will J. Cameron, Harry C. Phibbs, S. DeWitt Clough, George H. Merck and Prof. E. N. Gathercoal.

England Is Well Represented

England is well represented in the group of foreign exhibits. The exhibit of the Wellcome Research Institution of London comprises the work of three separate research foundations and two medical research museums. The Wellcome Bureau of Scientific Research demonstrates the effect of research upon diseases, particularly those effecting residents in tropical and subtropical countries. Specimens of work from the departments of helminthology, protozoology, experimental pathology and bacteriology are seen.

The Wellcome Entomological Field Laboratories show appliances used in experimental work, such as safety containers for infected mosquitoes, apparatus for collecting and methods of observing live mosquitoes. Illustrations are shown of conditions found in Mauritius by staff investigators.

The Wellcome Tropical Research Laboratories, Khartoum, show how such a center may be used in the struggle against tropical diseases. A model of the floating laboratory used for the investigation of medical and other problems among the natives along the upper Nile is on display. Special attention is directed to the complete equipment of this research unit.

The Wellcome Physiological Research Laboratories have arranged a group of transparencies showing the buildings and laboratories. Charts, diagrams and photographs illustrate recent research work on diphtheria, tetanus and staphylococcus antitoxin, with the method of preparation, processes of concentration, methods of testing and standardization. Exhibits dealing with ergot and ergot salts form part of this exhibit, as well as recent work on the diseases of animals.

The Wellcome Chemical Research Laboratory displays antimalarial, antileprotic, amoebicidal, anthelmintic and antimonial drugs. The Wellcome Museum of Medical Science demonstrates methods of public display used in various national and international exhibitions. A new system of visual teaching and a general survey of human disease from every aspect are presented.

The Wellcome Historical Medical Museum has arranged a display of surgical instruments and appliances, showing their development from the crude artifact of primitive man to the machine made products of today. Pictures of physicians and surgeons who have contributed to the advancement of the science and pictures showing the practice of surgery and medicine from Anglo-Saxon times to the present day are shown.

France is represented by the Institut Pasteur. An illuminated map shows the world distribution of the institute branches. Photographs illustrate the life and works of Louis Pasteur.

Among the German exhibits is that of Robert Koch Institut. Photographs showing the life and works of Robert Koch are on display.

Many models throughout the medical exhibits are the contributions of the Deutsches Hygiene Museum, Dresden, Saxony. One of these is the life size Transparent Man whose interior organs, nerves, blood vessels and skeleton are in proper relation to each other and to the skin surface. The internal organs may be illuminated to show locations and relationships. Other life size dynamic models, as well as greatly enlarged models of various organs illustrating bodily functions and structure, are to be seen. Among these are a wooden model of the head and torso of a man cut into eight sagittal sections and another model cut into fifteen horizontal sections. Models that may be operated by the spectator show the various kinds of joints, circulation of a blood corpuscle, methods of breathing and the action of chest, diaphragm and abdomen, movement of the rima glottidis, and the function of the larynx in the formation of sound.

Exhibits From Italy, Holland and Canada

Photographs and manuscripts from Italy show the works of Galvani, Malpighi, Morgagni, Spallanzani, Leonardo da Vinci, Angelo Mosso and Vesalius. Equipment for research on muscles and models of machines used in medical tests for aviators are included in this exhibit.

Holland's Central Institute for Brain Research displays specimens, charts and drawings showing the structure of the brain and nervous system.

Canada is represented by McGill University. Pictures and photographs show the development of the general hospital. The first building erected on the present site in 1821 and subsequent additions are shown. The life and work of Sir William Osler is presented in connection with the hospital. An x-ray taken in 1896 is on display. A photo-

graphic history of McGill University is shown, as well as a panoramic view of the institution.

Exhibits from the United States will be considered in alphabetical order.

The allergy exhibit comprises charts, photographs and specimens relating to hay fever.

American College of Surgeons. Hospital progress is vigorously contrasted in a series of transparencies of methods and equipment "then and now." A model of the Harborview Hospital, Seattle, Wash., and a diorama of the Lister Ward at the Glasgow Infirmary, Scotland, are effective displays. Documents and photographs pertaining to Lister, his equipment, appliances and furniture used in early experimental work are to be seen. Four dioramas present early methods of performing operations and early hospital equipment.

Displays of American Associations

American Committee for the Control of Rheumatism. Charts and roentgenograms showing the causes, treatment and prevention of arthritis compose the major part of the display.

The American Heart Association presents charts that give the incidence of rheumatic heart disease, and models of the heart that show its structure. An electrocardiograph is also seen.

The American Library Association hospital division has arranged a scale model of a hospital library. Another model shows the method of carrying books to ward and private patients. One of the book carts is on display at this booth.

The American Medical Association exhibit deals with medical care, practice and education and the importance of maintaining health. Dioramas contrast the hardships of the early physician with medical practice of today. Dioramas also show the early and the modern hospital as well as the place the hospital occupies in the treatment of disease. A review of medical discoveries and their effect on public health is shown by charts and diagrams. A relief map shows the location of all medical schools in the United States.

American Pharmaceutical Association. A replica of the "Checkered Drug Store" of 1842 is contrasted with the modern, completely equipped laboratory of a prescription drug store. The old drug store is a museum of all the paraphernalia once deemed necessary for compounding prescriptions. The preparation of prescriptions is demonstrated in the modern pharmacy. Raw materials used in manufacturing drugs and the final products are to be seen. Historical interest is found in a replica of the Ebers Papyrus, 1550 B. C., describing approximately 700 different remedies for human diseases.

The American Society for the Control of Cancer presents charts and photographs showing recognized methods of treating cancer by surgery, x-ray and radium. Some of the materials used by quacks are shown, together with analyses of their composition.

American Urological Association. Charts and drawings show various causes and results of diseases of the urinary tract and prostate gland. A historical display of urologic instruments from the museum of V. Mueller is part of this exhibit.

The Cleveland Clinic Foundations have prepared motion pictures showing circulation and modern methods of blood transfusion. A historical collection of blood transfusion instruments is displayed. The history of the x-ray is presented by charts, photographs and early apparatus. Glandular relationships are shown by charts and specimens.

Chicago Board of Health. The work done by this institution in the control of disease is illustrated by diagrams, lantern slides and equipment.

Chicago Centennial Dental Congress. Part of this display is a museum showing specimens of early dental work and equipment. Present dental equipment and methods are also shown.

Chicago Goodwill Industries. Equipment used for treatment in occupational therapy is on display and will be in operation. The machines shown are a small table loom, floor loom, jig saw and work bench.

The Chicago Medical, Dental and Allied Science Women's Association uses a large book, 4 by 6 feet, for questions and answers on the subject of maternal hygiene. Diet and dress are also stressed in exhibits.

The Chicago Municipal Tuberculosis Sanitarium presents many roentgenograms and specimens showing the condition of infected lungs. One feature of this exhibit is a painting, "Sower of Seed."

The Chicago Tuberculosis Institute. Decorative charts and murals give the history of the struggle against tuberculosis.

The Chicago Medical Society and Woman's Auxiliary. Charts tell the history of the society. A registration desk is maintained for physicians and members of the medical auxiliary.

A Variety of Educational Displays

The Georgia Warm Springs Foundation. Photographs and drawings of poliomyelitis are shown and a motion picture presents treatment methods.

Harvard University and Massachusetts General Hospital. Books, monographs and prints convey the contributions of these institutions to medical and surgical practice. A diorama shows the first public demonstration of anesthesia with sulphuric ether.

Infant Incubators. A hospital for premature babies has been erected and will be maintained for the duration of A Century of Progress. In this building, designed by Schmidt, Garden and Erikson, there is a completely equipped nursery and a room for the incubators.

Loyola University. Sections through all parts of the human body are displayed in specially designed glass cases.

Marquette University and the Milwaukee County Hospital. Bright's disease in its historical aspects and its modern treatment is illustrated by specimens, charts and photographs.

The Maternity Center Association of New York. Photographs and charts describe the necessity for prenatal and postnatal care. An inexpensive, hygienic layette is shown also.

Contributions From Universities

The Mayo Foundation. The work of this institution on diseases of the digestive tract, thyroid gland and sympathetic nervous system is shown by wax models of dissections, transparencies, charts, motion pictures and roentgenograms. A model presents the layout of the gastro-intestinal division of a modern x-ray department in a large clinic.

The Milwaukee Museum. Primitive medicine as practiced by the American Indian, and his herbs, charms and medicine used in the treatment of disease are shown.

Northwestern University. Progress in medical teaching and diagnosis is shown by chart and photograph. Forty centuries of anatomical illustrations are seen in this exhibit. Physiologic and pathologic sections and specimens of the human and the animal stomach and intestines are shown.

The Society for the Prevention of Asphyxial Death. Adult and infant models of the Emerson diaphragm respirator are on display.

The United States Public Health Service. Various phases of government work in public health and sanitation are shown by charts, photographs and models. Some of the diseases dealt with are malaria, pellagra, tularemia, undulant fever, typhus fever, spotted fever and psittacosis. Models show a modern milk plant, school room, septic tank, water purification plant, disinfecting plant, and rat-proof wharf, warehouse and dock.

The University of Chicago. Rehabilitation of the crippled child is the subject of this exhibit. Models, photographs, roentgenograms and motion pictures show the progress and treatment for these cases. A diorama shows an orthopedic ward of six beds.

The University of Illinois. The diseases of hay fever, tuberculosis, pneumonia, rabies and hemophilia are illustrated by charts, transparencies and specimens. Models show an oxygen room, an air conditioned room and the university medical campus. Four dioramas represent progress in sewage disposal methods and their relation to sanitation and water supply.

The University of Wisconsin. Books, photographs and charts tell of the early work on gastric digestion.

An emergency hospital on the ground floor of the Hall of Science, not an exhibit, is open for inspection by hospital people. The hospital was designed by J. E. O. Pridmore and is administered by Dr. F. W. Baylor. An article describing this hospital in detail will appear in a future issue of THE MODERN HOSPITAL.

Commercial exhibits from the medical and hospital fields have carried out the general plan of A Century of Progress by showing the discovery, historical developments, manufacture and uses of materials and equipment. Information rather than commercialism has been the goal of the industries in preparing their materials. Again the exhibits will be considered in alphabetical order.

All exhibits are in the Hall of Science except where otherwise designated. (A) will designate Agricultural Building; (G E), General Exhibits Building; (E), Electrical Building; (H P), Home Planning Building, and (G M), General Motors Building.

Abbott Laboratories. Paintings, charts and motion pictures deal with sources of vitamins A and D. The discovery of haliver oil and its uses are emphasized.

American Radiator and Standard Sanitary Corporation. The operation of air conditioning equipment used to cool this building, located near the General Exhibits Building, may be observed through glass panels in the machine. Other air conditioning equipment, boilers, radiators and a hospital wash-up sink and service sink are shown.

Bauer and Black. There are animated displays demonstrating new process cotton and handi-tape dressings. Other products are also on display.

Commercial Exhibitors Show Products

Bausch and Lomb present a display of microscopes, optical instruments and photomicrographs.

The Burroughs Adding Machine Company (G E). Shows paintings representing early attempts of man to count and record business transactions. Some early devices are also on display. Contrasted with these are the latest developments in business machines.

Small dioramas showing the use of medicine at home and at the Antipodes are presented by Burroughs Wellcome. Stages and processes in the

preparation of many medicinal products are seen. The story of medicine and first aid is projected upon screens.

In the Central Stations Exhibit (E) a large diorama shows the production and use of electricity. Here are also the model hospital operating room described in the June MODERN HOSPITAL and models showing new types of illumination in the restaurant, classroom and shop.

Century Electric Company (E). The latest development and internal structure of fans and motors are demonstrated. A splash-proof motor is shown running while standing in a pan of water.

Copper and Brass Research Association (G E). The many possible uses of these metals are shown in building products.

Curtis Lighting (E). Transparencies show lighting modernization by contrasting old and new methods of illumination.

Equipment of Many Kinds on Display

A. B. Dick Company (G E). The development of stencil duplication and its processes are presented. The latest machines, photographic duplicators, mimeo-illustration, color, styli and Formograph stencils are to be seen.

Dictaphone Sales Corporation (G E). A complete office set-up is used to demonstrate the latest dictaphone equipment.

Electric Storage Battery Company (E). Various storage batteries and their construction form the display.

The Frigidaire Corporation (G M) features refrigeration and air conditioning equipment. The mechanical elements of machines are also shown.

Gaertner Scientific Corporation. A new piece of hospital equipment is being shown. It is an injection pump or controllable therapeutic apparatus designed according to I. H. Chilcott, M.D. It may be used for blood transfusions, venoclysis, proctoclysis, transgastric feedings and drainage, jejunal feedings, continuous gastric drainage, decompression of chest or bladder and dakinizing of wounds.

General Electric Company (E) features the principles and operation of the fever machine. The photo-electric cell, sunlamps and air conditioning equipment are also seen in this display.

The General Electric X-Ray Corporation shows the new shock-proof x-ray apparatus and all types of Coolidge x-ray tubes and radiographs.

General Foods Corporation (A) presents dioramas, steriopticon slides and products giving the story of sixteen products manufactured by the company. Methods for preparing appetizing dishes from these products form part of the exhibit. Quick frosted foods such as packaged meats, poultry, sea food, vegetables and fruit may also be seen.

Gerber Products Company. Strained vegetables are on display. Photographs and motion pictures show the processes of preparation.

Hanovia Chemical and Manufacturing Company. A new Group-Irradiation Alpine Sun Lamp and other therapeutic lamps are shown in operation.

Hild Floor Machine Company shows complete process of refinishing old, marred wooden floors. Finishing and cleaning methods for all types of floors are illustrated by samples of flooring. A motion picture demonstrates the procedure for floor maintenance and actual equipment is shown in operation.

Johns-Manville. The composition of flooring, roofing and acoustical materials is shown by steps from the raw material to the finished product in the Johns-Manville Building. The value of acoustical treatment is given a practical demonstration.

S. C. Johnson and Son, Inc. (H P) have arranged large panels of flooring materials showing results obtained by various kinds of wax finish on all types of floors. A general exhibit on wax is found in the biology section of the Hall of Science.

Junket Folks Company (A) present methods of preparing attractive dishes with junket and something of the historical background of the product.

Kraft-Phenix Company (A) performs the entire operation of manufacturing and canning mayonnaise. A lecture explains each of the steps in the process.

Libby, McNeill and Libby (A) have prepared dioramas showing the sources of various foods. Preserved products are shown in glass containers.

Wall Treatment for Operating Rooms

Linde Air Products Company demonstrates the properties of liquid air.

The Mallinckrodt Chemical Works exhibit is divided into two sections, one dealing with medicine and the other with general uses of chemicals. Motion pictures show diagrammatically the manufacture of ether. The first successful operation under ether performed at Harvard Medical School is reenacted.

Roentgenograms show unusual conditions in G-I x-rays and cholecystograms. A corner of an operating room with mural design covering the wall shows the trend of decoration for the operating room. Transparencies of this type of decoration as used in a St. Louis hospital show an actual installation of this wall treatment.

The Masonite Corporation supplied Presdwood, Quartrboard, Masonite insulation and Masonite flooring for the model nursery and infant incuba-

tors. One of the houses in the Home Planning group is built with this material.

Merck and Company. A fully equipped prescription department in which the actual preparation of prescriptions is performed is one part of this exhibit. In an adjacent chemical laboratory experiments are performed. The products of this company are displayed and a motion picture tells the story of the use of medicine. Dioramas show the beginning of the company at the Darmstadt Pharmacy and further developments following the acquisition of the Powers and Weightman Chemical Works. A diorama shows the T. W. Richards Laboratory at Harvard University.

Ancient Surgical Instruments May Be Seen

Miracul Wax Company (HP) demonstrates the use of Dri-Brite floor wax on various types of flooring.

In the V. Mueller and Company exhibit, display cases around the central rotunda reveal surgical instruments dating back about one hundred years and also modern instruments. Other instruments from the museum of this company and much of their modern equipment are used to illustrate medical progress in the exhibits on medical science.

The National Oil Products Company presents information on the vitamin D concentrate extracted from cod liver oil by the Zucker-Columbia process. The introduction of vitamin D into milk and bread and the control of dairies are explained.

Otis Elevator Company. A working exhibit of elevator machinery may be seen in the penthouse of the Skyride Towers.

Petroleum Heat and Power Company (G E). The Arco-Petro Hot Water Heater and Petro burners of all sizes are displayed.

Proteo Foods, Inc., show by motion pictures the production of Proteo bread. Its restricted carbohydrate content is explained.

Quaker Oats Company (A). The actual manufacture of Quaker Oats takes place in the exhibit of this company.

RCA Victor Company (E). A replica model of the interior of a hospital showing the installation of centralized radio and sound distributing systems is featured by RCA Victor Company. Two types of centralized radio systems show the possible selections of equipment to meet various hospital needs.

G. D. Searle and Company. Motion pictures show the treatment of varicosities with sodium morrhuate. Drug products are included in this exhibit.

E. R. Squibb and Sons. A German apothecary's shop of the seventeenth century has been imported and installed as part of the E. R. Squibb and Sons exhibit. Two paintings showing the hospital as a community asset and as the ideal of the manufacturer are presented. Demonstrations of supplies for hospital service form another part of this display.

Standard Brands, Inc. (A). Pictorial presentation of the delivery system used in distributing yeast and coffee forms a base for the circular booth of Standard Brands, Inc. Dioramas tell the stories of Fleischmann's yeast, Chase and Sanborn's coffee and tea, Royal baking powder and Royal desserts. Motion pictures and data on bread, sponsored by this company, may be seen in the Hall of Science, while a scientific exhibit on yeast and fermentation is on display in the biology section.

Stewart and Ashby Coffee Company (A) presents tea and coffee packing machines in operation showing the latest methods used in vacuum packing.

Union Carbide and Carbon Corporation. Two models, one of a sun room with carbon arc lamps and the other of an oxygen tent, are part of the Union Carbide and Carbon Corporation exhibit. Therapeutic carbons are also seen. A new product, "Vinylite," made from vinyl resins, is shown in a multiplicity of uses. It may be molded to form doors, wall panels and counters, and may be extruded for moldings. Flooring and other construction materials, as well as lacquers, may be manufactured. Vinyl resins used in the construction of three rooms of an apartment demonstrate the possibilities of this material.

A Liberal Education in Electricity

Vitamin Food Company and Vegex, Inc., display cages of control rats demonstrating the results of vitamin B deficiency in the diet.

The Wander Company sponsored the ten-foot robot that lectures on food chemistry and nutrition. This robot was built by the W. M. Welch Manufacturing Company.

West Disinfectants. Porofill, made in many colors, is a new paint material for all types of surfaces. Its application is shown by West Disinfectants. Soap and disinfectants are also shown.

Westinghouse Electric and Manufacturing Company (E) presents principles and applications of electricity to show developmental trends of the future. The actual mechanism of refrigeration is shown at work under glass. All types of lamps, from the x-ray type to the grain of wheat lamp, may be seen. The photoelectric cell is demonstrated as a door closer, fire detector, card sorter and safeguard against robbery. The sweetness or sourness of fruit is tested by an electric meter. A general understanding of the uses of electricity may be gained from this exhibit.

Purifying and Tempering Indoor Air

Hospital officials contemplating the erection of new buildings or rehabilitation of old ones should investigate the new air conditioning equipment. Admirably adapted to modern hospital practice, air conditioning is rapidly becoming essential

AIR conditioning is rapidly becoming an important factor in improving health conditions among people at work, at play and at home. It is destined to play an even more important part in contributing to the welfare and comfort of patients in hospitals. Before considering the application of this important new development to modern hospital construction and rehabilitation, it is necessary to understand exactly what it comprises.

In winter air conditioning equipment affords constant forced circulation to avoid stagnation, stratification and concentration of odors; continuous air purification to remove dust and other organic impurities as well as unpleasant odors; evaporation of sufficient moisture to maintain correct humidity during the heating season.

From the standpoint of summer use, air conditioning equipment actually lowers the temperature on torrid days approximately 10 to 15 degrees F. and removes excess moisture when the humidity is too high for comfort.

The desirability of air motion may be demonstrated any sultry summer day when the air is still. Extreme discomfort is suffered until a slight breeze comes along. Even though there is no change in temperature and relative humidity, considerable relief is obtained by virtue of the increased air movement. This is because air motion produces a cooling effect and actually lowers skin temperature although it does not lower air temperature. "The human body generates heat rapidly," a leading engineer explains. Excess heat is dissipated by radiation, convection and evaporation of perspiration on the skin surface. Air motion greatly increases the removal of heat by convection and also expedites evaporation of perspiration. However, the value of air motion alone as a means of obtaining comfort is limited.

In a heated room without air motion, temperature at the breathing line may be correct for comfort while the occupants may have a distinct feeling of coolness around the ankles and feet. Air motion avoids this stratification and also the concentration of body odors.

Continuous air purification, particularly important from the standpoint of health, deserves special attention. We need look back only a few years to realize what rapid strides have been made in safeguarding the health of the American public. Yet it is only recently that steps have been taken to ensure purity and quality of indoor air.

The outdoor air which city people breathe is never clean and pure except after rain. At other time it is contaminated by smoke and dust.

Air washing is a satisfactory and effective means of air purification. An air conditioner that circulates the air through a dense spray of artificial rain imitates Nature's method of purification.

Reducing Summer Temperatures

Density of the spray in an air washer is an all-important factor. The spray chamber must be completely filled with a water curtain or mist of sufficient density to prevent impurities from passing through the chamber without contacting the water. If the atomization of the water is in the form of coarse drops, a comparatively large quantity of water must be used to fill the spray chamber completely. On the other hand, if the water is finely atomized, it is possible to obtain density in the spray chamber with a small volume. The small unit air washer is practicable in such a case.

Humidification is essential in correcting the effects of overheated, oppressive, dry air generally conceded to be the cause of many winter colds and respiratory ailments.

Air conditioning as applied in summer involves cooling and dehumidification as well as circulation and purification. Cooling requires little comment. Anyone who has sought comfort when the indoor temperature stood above 90° F. hardly needs to be convinced that it is desirable to reduce that

temperature. It is not desirable, however, to maintain an indoor temperature of 70° F. when the outdoor temperature is between 90 and 100° F. In other words, while it is practicable, it is not necessary for health or comfort to maintain a temperature differential of more than 10 to 15° F.

Dehumidification is essential to comfort in most sections of the country where cooling is needed. A high relative humidity in summer is actually more oppressive than a high temperature with a comparatively low relative humidity. When the relative humidity is above 60 per cent, the air does not absorb perspiration readily, the clothing becomes damp and general discomfort is felt. Lowering relative humidity to the point where perspiration is evaporated rapidly greatly increases comfort without any reduction in temperature.

Danger of Infection Is Decreased

With a clear understanding of what air conditioning actually comprises, it is possible to consider its application to hospital use. Speaking in general terms, sterilization and cleanliness have been the first requisites of every factor pertaining to hospital operation. And yet, little was done until recently to purify, wash and properly prepare air that patients and staff workers breathe.

Air conditioning as applied to operating rooms, for example, must include the maintenance of proper relative humidities, both summer and winter, to eliminate danger of explosions in the administration of anesthetics. It also assures air purification, removal of dust and odors and cooling to provide comfort which is of such vital importance to surgeons.

In the nursery and premature wards, humidification assures a more nearly normal atmosphere for infants and removes germ laden dust, thus decreasing danger of infection. Treatment of pneumonia and other respiratory affections is greatly aided by humidification, while purification of air avoids the possibility of complicated infections. Air washing likewise plays an important part in relieving asthma and hay fever, the pollen responsible for these troubles being removed by the washing process.

Private room accommodations are considerably improved through air conditioning and its attendant advantages. Humidification creates a healthful atmosphere, purification removes dust and odors and makes the room more enjoyable and cooling adds to the patient's comfort.

The hospital maintaining such equipment naturally must charge a higher rate. On the other hand, the added comfort of the patient is well worth the additional dollar a day estimated expense.

Granted that air conditioning is admirably adapted to modern hospital practice, and is even essential, the matter of installation must be carefully considered.

Two general types of air conditioning equipment are available. The central station system includes a large air washer, usually installed in the basement or penthouse, with conditioned air ducts leading to the space to be served. Air is drawn out of space, mixed with additional outdoor air, washed, heated or cooled by refrigeration, and returned to space through distribution ducts. Installation of such a system in a building already standing is likely to be expensive because of the necessity for introducing the ducts. Then, too, this type is obviously not adapted to hospital use because of the fact that air cannot be taken out of one room and put into another because germs may be prevalent. For this reason when a central station system is used in hospitals all air, before it is cleaned and properly conditioned, should be obtained from outdoors rather than from within the rooms.

The type of air conditioning equipment best suited to hospital needs is the individual unit installed in each room or ward. This unit will recirculate only the air in that particular room. In this equipment are embodied facilities for refrigeration and dehumidification for summer. Installation requires a water supply and a waste pipe to carry away water and impurities. An electric outlet for operating the fan is also necessary.

For summer cooling a connection to a refrigerating machine or some source of sufficiently cold water is essential. Water is cooled to a temperature of from 40 to 50° F. and then recirculated to the unit air conditioners in various rooms. One central refrigerating machine may serve twenty-five or fifty small units.

Cost Is Moderate

One type of conditioner with sufficient capacity for a private room of average size is furnished in a small cabinet about 20 inches wide, 34 inches high and 8 inches deep. The cabinet is placed in one corner of the room and the air is discharged upward. Or the cabinet may be hung on the wall near the ceiling so as to conserve floor space. If a bath or closet adjoins the room, the conditioner may be placed there and an opening cut in the wall to afford passage for the air.

The cost of winter conditioning—air motion, air purification and humidification—for a room of moderate size has been estimated at $150, including installation. Addition of refrigeration facilities for all year conditioning would approximately double the cost. Hospital rooms equipped for summer cooling could furnish a constant supply of ice water for patients at small additional expense.

Group Practice and the Rôle of the Family Doctor

By RALPH H. PINO, M.D.
Detroit

DEFINITE workable plans making available to the public up-to-date medical facilities at costs within reach of the so-called middle class are essential and the medical profession must devise these plans. The medical profession is no more responsible than the rest of society for this class, but in health matters it would seem appropriate for the medical profession to devise plans in accordance with what the profession believes to be proper. Otherwise, some other group will attempt to develop ways and means of meeting the medical needs of the people.

Wayne County, embracing Detroit, Highland Park, Dearborn, Hamtramck and several smaller Michigan cities, is more cosmopolitan and embraces a higher percentage of people in the lower income class than most counties of large population. The care of this middle class, from the health standpoint, is a problem for the county medical society. The welfare commission and the department of health care for indigent public health problems in a most satisfactory way. Making available adequate medical facilities for the medium and small wage earner class is the real problem in Wayne County. It concerns vitally not only the people who demand complete diagnostic facilities, but the profession which tries to supply this service at cost commensurate with income.

A Complete Service to Fit Income

Group practice has received much consideration in recent years. It has advantages and disadvantages when considered in the light of complete medical service. The Wayne County Medical Society is attempting to supply to the middle class a type of service retaining much that is desirable and eliminating much that is undesirable in group practice. We realize that the majority of all patients will continue to consult their own physicians as they have always done, but we are offering to that 40 per cent who either neglect themselves partially or entirely or visit free clinics when they could pay something, a complete service proportionate in cost to their income.

The average middle class individual realizes that the clinic, whether free or otherwise, offers all the specialties and he can there be referred to other physicians as may be necessary to cover his needs. The clinic seems efficient to him. He may not like the "production methods" often apparent and he may not like the fact that he cannot choose a physician, but he puts up with the situation. He knows, too, that if he needs a physician at home suddenly, the family doctor is a real necessity. He may feel, however, that the family physician cannot provide complete diagnostic facilities.

The Science and the Art of Medicine

Conflicts arise in the minds of the public and of the profession as the demands for modern complete diagnostic facilities become more and more insistent. Mechanized services supplied in some groups and clinics are in sharp contrast to the methods of the old-time family physician. Some middle course needs to be found—some method that is complete but at the same time personal and human. The failures and successes of the physician should be his own responsibility, not that of an institution, an industry or a state, with medical appointments at the mercy of a political party.

The majority report of the Committee on the Costs of Medical Care might seem ideal from the efficiency standpoint. Surely a sincerity that cannot be denied pervades the personnel of its advocates. They pay full homage to the science of medicine and apparently believe that its fruits can be dispensed with factory efficiency. They undoubtedly recognize the art of medicine, but it is doubtful if some of the methods they advocate would sufficiently conserve the human side of the practice to make the science side satisfactorily workable.

The Wayne County plan, briefly, is group practice by the county society with the society building as headquarters and the members' offices and laboratories as clinical facilities. How hospitals can or will come into the picture is not yet entirely worked out, but that their cooperation can be complete seems apparent. We believe that, in the best interests of both the hospitals and the public, hos-

pitals should concentrate on caring for patients sent them by physicians in practice and should refrain from entering into competition with physicians who send in the patients. Free clinics attached to hospitals have become traditional because of lack of better means of caring for poor people. They have grown into part-pay institutions and now, by suggestion of the Committee on the Costs of Medical Care, would deliberately embrace the middle class also.

Caring for Indigent Patients

We have the city physician's office and city and county hospitals to care for chronic indigents. Other hospitals may wish to care for some of these for the benefit of interns and for other teaching purposes. Let these hospitals take some of the indigents and let the hospitals be reimbursed from public funds for their care instead of increasing city and county hospitals. Persons of independent means consult their physicians and arrange their own medical affairs. The majority of middle class patients, let us repeat, will continue to consult and negotiate with physicians for their care. The Wayne County plan provides for that 40 per cent who, according to the report of the Committee on the Costs of Medical Care, cannot afford complete care, or who automatically go to free clinics.

In Wayne County the city physician's office cooperates with its representatives in the county medical society offices so that the really indigent patient is referred directly to the city physician's office. The acute indigent is cared for in the private physician's office, often by younger men who are not busy and who wish the experience. The city or county provides laboratory facilities for these and hospital facilities when necessary.

A central bureau of registration for all indigent or semi-indigent cases is being organized and will develop as experience warrants.

So-called middle class patients who can afford to pay something are classified so far as possible according to their ability to pay. Forms are used for the purpose of classification. When extensive investigation is necessary, the material is turned over to the physicians' business bureau. This bureau, housed at the society's headquarters and supervised by a society committee, comes under control of the county medical society although it is independently managed. This organization serves as a collecting agency for members of the society who wish to avail themselves of its services. Deferred payments for extensive medical care can be arranged through this organization by doctors and patients. Forms can be filled out either at the society headquarters or in the physician's office.

Let us now outline the procedure. A patient presents himself at the physician's office. He submits evidence that he is unable to pay the usual fee. It is determined that he should be able to pay, for example, 25 per cent of the normal fee. The doctor cares for him or refers him to cooperating members if his case requires consultation, laboratory tests or x-ray. Under this plan the original physician in the case, whether family doctor or specialist, feels free to ask all consultants or laboratories to charge only 25 per cent of the normal fee. Thus whether the patient needs $5 or $500 worth of attention, he gets it at 25 per cent of the normal rate. For a patient earning $100 per month, 25 per cent of $500 might seem a good deal. But through the physicians' business bureau the patient could arrange to pay this amount to doctor or hospital on a deferred payment basis. This patient would thus maintain the same independence as the one paying the normal fee.

If the patient has no physician he goes directly to the society headquarters. He gives the necessary information as to his financial status and is given a directory from which to choose a physician, and a specialist if one is needed.

The county society functioning as a group can give the public much desired medical information which the individual or the individual group cannot disseminate without seeming to advertise.

A County Society Group Plan

Private group practice to care for some of the people has come to stay. It is a fine thing. Several such groups are functioning in Detroit. But private groups cannot meet all needs, whether independently organized or formed by hospital staffs about hospitals or otherwise. It is an indisputable fact that we need family physicians in every neighborhood. Under present methods of practice these men are quite isolated. Many of their patients cannot afford all the consultation that is necessary. The patient realizes this and often leaves the family doctor and goes to a clinic where facilities are available, however much he dislikes it. Or he may go independently to a specialist or to a laboratory.

Given a county society group plan under which the family doctor is a part of a large diagnostic group with consultation, laboratory and other clinical facilities at a price the patient can pay, the standard of the practice of medicine will be raised all along the line. The family doctor will no longer be isolated. He will "belong." The patient will feel this indirectly, and there will be some trekking back from the clinics and from the ranks of the uncared for to the source of personal attention. The patient will learn to maintain a higher degree of independence.

Do Hospitals Pay Too Much for Heat, Steam and Power?

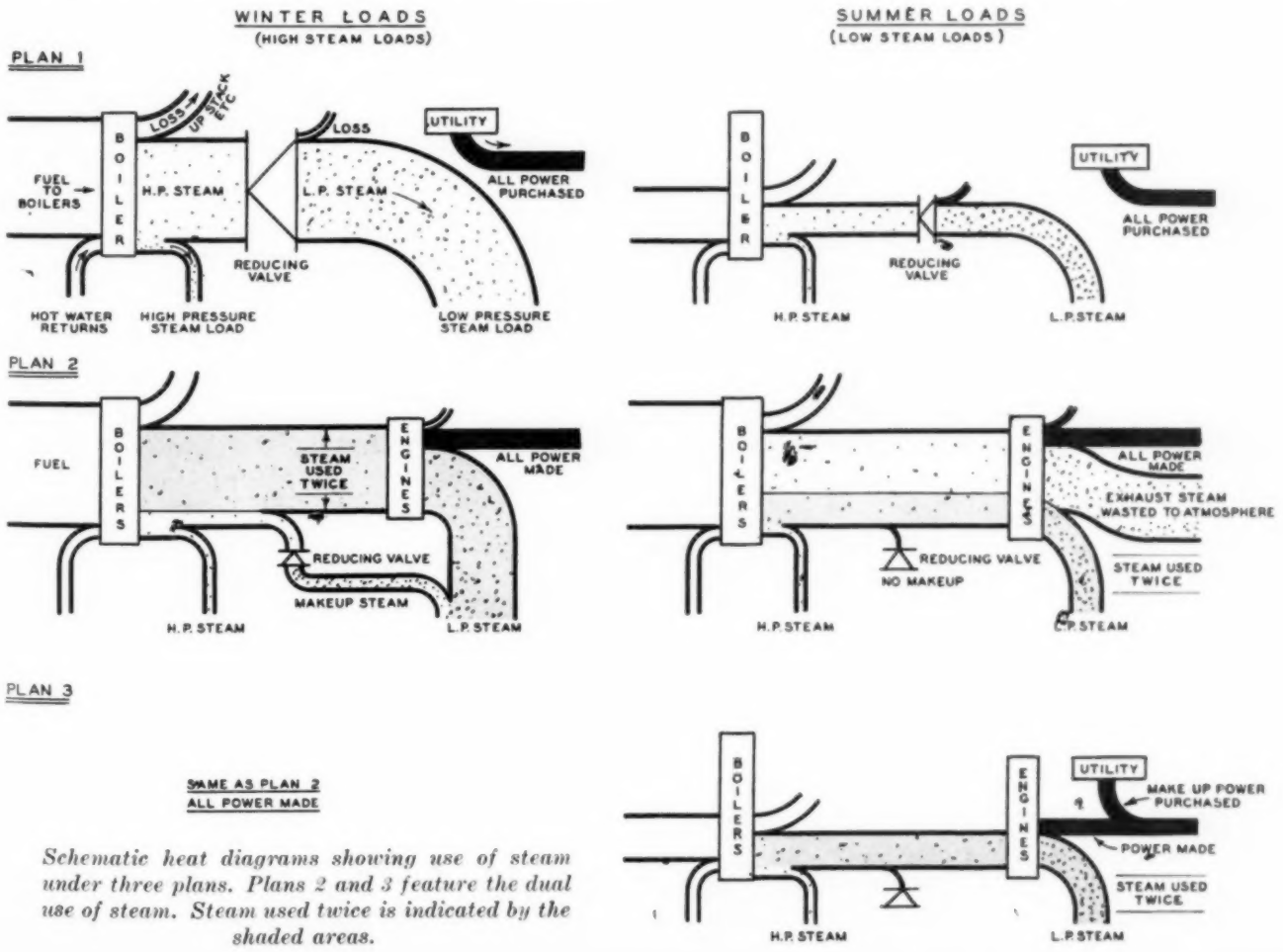
A MAJOR expense in every hospital, small or large, voluntary or governmental, an expense that operates day in and day out, is that of steam, heat and power. These services are so closely related that their costs are usually combined into one item. This includes high pressure steam for sterilizers, laundry and kitchen; low pressure steam for building heating (space heating), hot water heating and feed water heating, and power for lighting, refrigeration, laundry, equipment drives and even for baking and localized heating.

The amount of money spent each year to maintain these services at hospital standards is a considerable part of the hospital operating budget. The cost of equipment (boilers, stokers, piping, radiation, heaters and their housing) necessary to make these services available is a considerable part of the capital investment in the hospital. These two financial considerations demand that the cost of such services be carefully weighed, first, that current expense may be reduced to a practicable minimum, second, that maximum return may be obtained upon the capital investment. In the individual institution there usually is considerable possibility of betterment through change of equipment, through change of arrangement or through change of operating methods.

In general, these services are provided under one of three different plans.

In Plan 1, steam is generated at the highest pressure needed for laundry, sterilizing or kitchen use, and lowered in pressure by reducing valves for heating water and buildings. All power is purchased from the public utility (power company).

In Plan 2, high pressure steam is generated for



Schematic heat diagrams showing use of steam under three plans. Plans 2 and 3 feature the dual use of steam. Steam used twice is indicated by the shaded areas.

In Plan 2, high pressure steam is generated for

high pressure uses and for steam engines or steam turbines. All power is made by these engines or turbines. The steam exhausted from these engines or turbines is used for low pressure services, in heating water and buildings. The engine or turbine serves as a power-giving reducing valve. Thus the steam for low pressure use serves a dual purpose, giving power and heat; its cost is divided between the two services.

In the summer when need for steam is low, the demand for power makes available more exhaust steam than is needed. The excess steam is exhausted into the atmosphere, or collected in a condenser, when the purchase price of the latter can be economically justified by the resulting saving of the steam. In the winter when steam demands are great and exceed the amount exhausted from engines or turbine, the difference is made up by passing high pressure steam through reducing valves, as in Plan 1.

The provision of steam, heat and power constitutes one of the major expenses of hospital operation. Of all expenses it is probably the least understood by the hospital executive. Appreciable reduction of this expense is possible in many institutions, but it requires detailed individual study of methods and costs, with both executive and engineer collaborating

In Plan 3, high pressure steam is generated for high pressure use and for power use. It differs from Plan 2 in that only that amount of power which is produced by the steam needed for low pressure services is generated. Power which is needed beyond that given by this steam is purchased from the public utility. So, power is partly made, partly purchased. There is no waste to atmosphere or to a condenser in the summer, there is usually no valve reduction (with its waste) of high pressure steam in the winter.

In some cases public utilities provide no schedules which permit such cooperation, or schedules which contain prohibitive rates. In this case, the hospital must decide boldly between Plan 1, with all power purchased, and Plan 2, with all power made.

These three arrangements are available to all hospitals, and there is no rule of thumb guide to dictate which one a particular hospital should choose. In general, most small hospitals find Plan 1 advisable, most large hospitals Plan 2, but conditions peculiar to the indivividual hospital and its locality prevent any general rule being applied upon the basis of size or other principal characteristic. A detailed study of all the factors involved is necessary. Such a study is an engineering one and requires technical consideration by an engineer, collaborating with the superintendent or other administrator.

In such a study it must always be borne in mind that the principal requirement of the hospital is reliability. Heat cannot fall below hospital standards, steam cannot drop to a pressure below that assuring sterilization, light cannot fail during operations, the degree of refrigeration cannot jeopardize cultures. Provision of power and steam services must include ability to take care of emergencies, for incidence of emergency demand for such services is as uncertain in time and degree as incidence of disease itself. The study must always contemplate provision beyond that of mere normal adequacy; economy must be determined upon a plant which has reserve capacity.

It is possible, even probable, that a plant now operating under one of the three plans mentioned above can effect considerable reduction in expense through simple modification of that plan or through changes in method of operation. If operating under Plan 1 or Plan 3, it is well to determine that the most advantageous utility rate schedule is being used. Utilities ordinarily have a number of schedules which are possible of application to a particular hospital. Transfer from one to another may mean the changing of some equipment, such as the substitution of a synchronous motor for an induction motor, an increase in the service voltage or alteration of other features considered by the rate makers, but it may more than pay the cost of the changes. In other words, there are power schedules and there are power schedules, and all too little study is usually given to this matter by the purchaser of power.

Under all plans, there is possibility of economy through change of equipment, of fuel and of routine of operation. It may be possible so to alter the peak demands of service that the demand charge for purchased power can be reduced, or the necessity of running certain pieces of steam generating and power plant equipment obviated. Careful attention to one's own plant and one's own plan of operation will often effect surprising economy, particularly if the plant has been allowed to carry on without frequent direct and qualified supervision.

More radical savings may sometimes be effected

by changing from one plan to another. A plan which was of greatest advantage in 1928 may today be of least advantage, through changes in the cost of fuel, of labor and of equipment, or through changes in rate schedules and in the ability and willingness of utilities to cooperate under Plan 3.

The use of the same steam twice, first to produce power and second to give heat, with resulting reduction in the cost of each service, is an attractive feature in favor of Plans 2 and 3. Unfortunately, the demands for power and for low pressure steam do not coincide in time and degree, so that maximum advantage cannot be taken of this dual use; at times, more heat is needed than the exhaust steam will give, at other times more power is needed than is given by the exhaust steam required. In times of high steam demand, high pressure steam must be reduced through valves to supplement that given by the engine or turbine exhaust; in times of low steam demand, some exhaust steam must be wasted to atmosphere. In the winter all or nearly all power is produced through such dual use; it is really a by-product, available at low cost. In the summer, when a good part of the exhaust steam is not used, power cost is high, for the steam exhausted to atmosphere must be charged to power alone. In some cases, the annual cost of power so produced is much lower than if it were purchased; in other cases, the reverse is true.

Thus, while it might seem that hospitals now operating under Plan 1 enjoy the greatest possibilities of betterment through a change to Plan 2 or Plan 3, there are instances where the change may be from Plan 2 or Plan 3 to Plan 1, particularly where utility rates have been reduced in the past few years.

Agreement Between Loads Is Essential

The demands for power and steam services vary with each hospital, but have certain similar characteristics. The building heating load is ordinarily the greatest steam demand; it varies widely with the season, from a peak in winter to zero in summer, and even in a given season it is subject to marked changes from day to day as governed by local weather conditions. On the other hand, steam for heating water varies but slightly with the season, taking its variations during the twenty-four-hour period, from a morning peak to a night low. Power demands are not so variable, with a twenty-four-hour peak usually early in the evening and a seasonal peak in the winter.

The degree to which a hospital can take advantage of dual use of steam depends primarily upon the degree of agreement which can be effected between these loads. The more closely the power load agrees with the low pressure steam load, the greater will be the dual use of steam and the lower the cost of the combined services. Part of any betterment plan where power is generated should seek closer agreement through various changes which are usually possible in the equipment and its arrangement, and in the scheduling of operations.

It Is an Engineering Problem

The average superintendent or hospital executive who attempts the somewhat involved study of these services without technical assistance will find himself as badly confused by kilowatt hours, peak loads, power factors and other technical terms as will the engineer by surgical terminology. While it is the superintendent's task to determine that maximum economy is obtained in providing these services, he requires the assistance of an engineer, for the problem is an engineering problem. In some cases, the head of his mechanical department is an engineer qualified to make such a study, but ordinarly this is not true, and the superintendent must engage outside assistance. In doing so, he should make sure that he chooses a consulting mechanical engineer of reputable standing in the community and in the profession. The equipment salesman and the utility salesman are not qualified to advise him, except as to details of the service or equipment they can furnish, for their point of view is naturally biased. A reasonable fee, for which the engineer will cooperate with the superintendent in making the study, can be agreed upon in advance; in a great majority of cases it will return high dividends when the recommendations of the study are put into effect. In the few cases where betterment is not indicated the study will at least certify unusually capable management.

During the past few years there has been marked progress in equipment manufacture, in the past two years, marked reduction in the cost of such equipment, which, combined, greatly increase the economic possibilities of betterment. As a result, whatever betterment is indicated can be made today at much lower capital investment and under more favorable credit terms than at any time in recent years, and it is to be hoped, in years to come.

The problem is an individual one, varying with the hospital, and subject in each case to individual study. It is also an engineering one, requiring technical study, preferably by reputable consulting engineers, today more available and less expensive than ever. It behooves the hospital executives to consider such study carefully.

What Others Are Doing

Centralized Control System of Anesthesia Gases

The most important single step in the University of Chicago Clinic's recent intensive economy drive was the exchange of the old bulky self-contained anesthesia truck units for the centralized control system with its recording equipment and the resulting substantial reduction of gas consumption, according to John C. Dinsmore, superintendent of the clinics.

In the first four months after this equipment was installed the total cost of anesthesia per operation was reduced to 41 cents. The saving in gas consumption alone is expected to pay for the new equipment and for the cost of installation in three years. In addition to this direct saving, the new equipment gives added safety and convenience, and protects a graphic record which is bound in the patient's history.

The gas storage and utility room at the University Clinics is on the seventh floor just above the operating suite. On one side of the room are the manifold inlets. For gases used in large quantities there are double inlets so that two tanks can be connected at the same time. Regulating valves are so set that when the pressure in the first tank drops to a predetermined point, the valve on the other tank opens. In this way a much larger percentage of the total amount of gas contained in each cylinder can be used with complete safety and the anesthetist can tell from her own individual machine that the reserve tank has been automatically placed in service. This reduces gas cost per operation.

Elimination of the heavy trucks loaded with tanks that had to be tugged about the operating suites has been advantageous. The new anesthesia unit in each operating room weighs about thirty pounds and is mounted on ball bearing casters. A child could move it easily. Each unit is attached to the wall of the operating room with 1⅛-inch rubber hose. Inside this hose are four tubes which serve the anesthesia machine with carbon dioxide, ethylene, oxygen and nitrous oxide. From valves on the walls compressed air and vacuum may be had.

With this new equipment the anesthetist is assured an unlimited supply of everything she can possibly need. Much of the charting is done automatically, leaving the anesthetist free to give her full attention to the patient.

In installing such a centralized control anesthesia unit, flexible pretested tubing should be used in order to avoid the difficulties incident to continued expansion and contraction due to temperature changes in the line. The minimum life of this equipment should be at least ten years.

Building Good Will for the Hospital

A two-fold plan that creates good will for the hospital and establishes a favorable impression on the patient and his family is being followed successfully at the Israel-Zion Hospital, Brooklyn, N. Y.

Each patient in the maternity building is urged, a few days before every national or religious holiday, to invite her husband to have dinner with her as a guest of the institution.

"The advent of a little one brings parents closer together than ever before and knits stronger ties within the family circle," according to Boris Fingerhood, superintendent of Israel-Zion. "Separation at such times is a hardship that must be undergone if the patient and child are to receive proper treatment. Bringing the family together on gala days injects a bright spot into hospital life and establishes a more cordial feeling on the part of the patient and her family toward the institution."

The other feature of Mr. Fingerhood's plan to build good will is his attempt to relieve the dread and fear of patients entering the hospital. This is accomplished through the presence on the staff of a woman doctor who does not practice, but whose sole task is to make patients feel at home.

She is advised immediately when new patients enter the examination room. She secures complete details and sees that they are comfortably settled in the wards to which they are assigned. Patients are thus placed at ease immediately and there is no time for their fears to become aggravated. Private patients are shown to their rooms and happily settled before the doctor calls. They are invited to make known their wants and are made to feel that it is the desire of the hospital to make them comfortable.

Each day this woman doctor makes her rounds, dispelling fear and thus helping to build health. Her contacts with patients who refuse to undergo needed operations have been particularly beneficial. In such instances she patiently describes the necessity for immediate action and the benefits to be derived. With real skill she breaks down the barrier of fear and dread.

The fact that this woman is a medical graduate gives her a certain standing and enables her to speak with authority.

The results of Israel-Zion's two-fold plan are daily manifest in the evidence of increasing good will toward the institution throughout the community.

Spending Money to Make Money

Modern equipment purchased the previous year to perform certain auxiliary services enabled one 150-bed hospital to keep "out of the red" the past year despite an average occupancy of well below 50 per cent. The purchase included a $16,000 laundry installation, a $4,500 ice and refrigeration machine and a $2,000 automatic stoker.

Specific figures on the economies effected by the laundry are available. Making allowance for the rates the hospital would have enjoyed from a commercial laundry, the total laundry bill for the year would have been $13,848. The actual cost of labor, material and upkeep of the installation during this period was $6,252. Credit was also given for $984 received by the hospital for laundry service rendered to graduate nurses and billed at current commercial laundry rates. This service was in considerable demand because the hospital laundry did superior work on the special uniforms. The net financial result was a saving of $8,580. This did not include any allowance for the cleaner, fresher and longer wearing linen which the hospital now enjoys.

The profits of many a hospital are frozen in such auxiliary services and can be made liquid only by study and betterment of auxiliary process and equipment — by spending money to make money.

Probably you can think of one or more practical ways to save time or increase efficiency. The Modern Hospital will welcome your ideas to put before other hospitals

A Hospital Side Line That Helps the Institution and the Public

By S. P. RAYMOND
New York City

ONE of the big problems facing the hospital executive today is that of supplying adequate facilities for free service, and at the same time providing revenue from private accommodations which stand empty. Conditions everywhere are much the same—wards are filled to overflowing while in private pavilions room after room is unoccupied and consequently unproductive.

In some instances, because of suitable layout, it has been possible to turn rooms previously occupied by private work over to out-patient or ward quarters. Unfortunately, however, this procedure is not always practical and many institutions are seeking ways and means of distributing their space so as to meet present day demands, as viewed from the standpoint of service to the community, with a suitable financial return to the hospital.

A study of the situation existing in Orange Memorial Hospital, Orange, N. J., has led to an interesting experiment which may ultimately mean a new type of service for certain hospitals. As worked out by F. Stanley Howe, director, it has also led to a large amount of favorable publicity which is of even greater importance.

Under this unique plan the hospital becomes a place in which to find complete rest and to lay a solid foundation for good health, rather than merely a last resort when serious illness befalls. "Going to a hospital when you are perfectly well?" is the question which naturally arises in the mind of the average man. After all, why not? If the hospital is successful in overcoming physical disabilities, why should it not be equally efficacious in helping to prevent them? In consequence, Mr. Howe's plan is creating an entirely new attitude on the part of the public toward the hospital, arousing much interest in it and winning for it numerous ardent friends.

In taking stock of the institution's physical resources, it was found that a group of ten private rooms, completely detached from the rest of the hospital, was available for experimentation. The plan conceived was to designate these rooms as a "Guest Suite" to be offered to the public as a haven of rest during the present troublous times. This, of course, is an entirely new conception of the function of the modern hospital.

The phrase, "Guest Suite," was to be featured in order to differentiate the service from that offered in any other part of the hospital. These

ten rooms, approached through a heavy swinging door, are completely isolated from all routine hospital activities. Inside the private corridor is found much of the atmosphere of a modern hotel. Some of the rooms are arranged in suites with private baths; others have running water. All are attractively decorated in soft colors with gay chintz draperies at the windows. A private enclosed solarium offers all manner of lounging comfort. On pleasant days an open roof solarium is available where guests may sit in the sun and enjoy an extensive view of the Orange Mountains.

The closed door plainly marked "Guest Suite" is symbolic of the whole plan which is based upon an honest desire to perform real service, as well as upon the hope of providing some additional revenue from accommodations for which there is at present little demand.

Many persons find that they need a few days of complete rest away from their usual surroundings. Perhaps a week-end will be sufficient time for complete relaxation. The business executive finds himself thoroughly fagged out at the end of the week. He determines to go home and rest. But unfortunately he cannot rest. The telephone keeps reminding him of pressing engagements. Friends with the kindliest of intentions keep intruding. The normal routine of the most harmonious family life is such as to detract from complete relaxation. A week-end at home is, at best, but a poor attempt to rest tired bodies and minds, and to quiet nerves.

Conditions in the "Guest Suite" are, of course, wholly different. Here is a service which caters only to people who are well. Occupants of these rooms must be able to wait on themselves. Anyone requiring the services of a nurse is accommodated elsewhere in the hospital. On the other hand, if the guest feels that an alcohol rub will help to induce sleep, a bell will summon a graduate nurse to perform the task efficiently. It is obvious, however, that signs of sickness must not be in evidence. All fear that the telephone will ring or that visitors or other reminders of the outside world will intrude is eliminated. The guest may sleep or read or drowse as he wishes, safe in the knowledge that he will not be disturbed.

His meals may be served either in bed, in a big chair by a window or in the floor solarium, as he wishes. The full range of the hospital's cuisine, with selective menus for all meals, is at his disposal. Orange juice, ginger ale, crackers and milk or a hot drink between meals or before retiring may be had without extra cost.

Occupants of the guest rooms are free to go and

The guest rooms are attractively decorated in soft colors with gay chintz draperies.

An open roof solarium, providing an extensive view of the Orange Mountains, is available for the guests.

come as they desire. If a guest feels that a walk or a drive through the surrounding country will be beneficial, he may leave the building and return without formality.

The cost for this service with its various comforts and advantages has been placed at $6 a day for a fully appointed room with tiled bath, or $5 a day for a similar room with running water. These charges, it was felt, would compare favorably with corresponding local hotel accommodations.

Once the general plan of service was determined, it became necessary to inform the public that these facilities were available. An attractive little booklet was first prepared. Its cover bears the picture of the closed door inscribed with the words, "Guest Suite." This cover in itself is sufficiently intriguing to cause the recipient of the booklet to turn over and find out what it is all about. Briefly and concisely he gets the entire story. Illustrations show a typical bedroom and views of the solarium. The envelope in which the booklet is mailed bears in the upper lefthand corner the inscription, "Guest Suite, 188 S. Essex Avenue, Orange, N. J."

Perhaps the most interesting form of advertising, or at any rate the most unusual from the standpoint of hospital procedure, is the space taken in one of the leading New York evening newspapers. A small cut of the bedroom is reproduced. Under it the following copy appears:

"Enjoy a real rest in the Guest Suite where 'Silence like a poultice comes, to heal the blows of sound.' Be our guest for a day . . . a week-end . . . as long as you wish. Sleep, read, drowse to your heart's content. View the beautiful Orange Mountains from our roof solarium. No telephone calls, no noise will disturb you. Our cuisine is unexcelled. Our rates moderate. Write for folder."

Although the plan has been in operation only a few months, results already reveal its many possibilities. The number of guests has not been large. One stayed a month and others have spent weekends with such beneficial results that they have made known their intentions of returning. Aside from guests who come of their own accord, there is potential patronage from relatives and friends of patients who are receiving treatment in the hospital and who want to be near at hand.

In this case, as in every new departure from customary routine, much experimentation has been done. Each guest presents a different problem. His reactions are carefully studied and his suggestions sought. As a consequence, new ideas are being introduced which will make the service more attractive.

The plan requires careful observation and watching. On the other hand, it has been proved to possess real possibilities. In the first few weeks of its operation it has increased the income of the hospital. The major point in its favor, however, lies in the helpful publicity it has brought.

What I Have Learned in Ten Years of Hospital Planning

By MYRON POTTER
Executive Secretary, Building Committee, Lakeside Hospital, Cleveland

BUILDING committees and others under whose control may be placed the design, the construction and the equipping of hospitals, either as individual buildings or as groups of buildings, are certain to encounter many perplexing problems in their work.

This article is based upon my observations during the past ten years while I was identified with the erection of hospitals and similar buildings, in the capacity of executive secretary of various building committees.

The work to be done under a building committee requires a carefully planned organization, the number of units depending upon the size of the proposed project. If the proposed project is a small one, an architect should be selected who is qualified by previous experience in designing buildings of the same size and type. The selection of an architect on this basis will, in the end, prove economical. It is essential that a qualified architect be selected. A hospital is a technical type of building and requires a specially trained architect. If the proposed project is to cost more than $500,000, for example, a larger organization will be needed, and after passing the $1,000,000 mark, a complete organization will prove an economy.

A Capable Secretary Is an Asset

An organization for the construction of a large sized project should consist of the building committee and its executive secretary, the hospital consultant, the architect and the engineers and the contractor. The expense of such an organization is not excessive, because only two of the units mentioned—the executive secretary and the consultant—are at all unusual. Both of these should prove to be actual economies.

It will be an advantage to the committee, and especially to the chairman, if the executive secretary is experienced in building operations. A general knowledge of hospital practice and technique on his part will be a valuable asset. A capable secretary will save a great deal of time for the individual members of the committee and will reduce the work of the chairman to a minimum. He will prove of economic value to the undertaking by developing structural savings in the detailing of the work. While this actually falls within the province of the architect, yet I have always found that changes could be made in the plans of even the best architect to the economic advantage of the building account, without loss in the quality or service of the building.

Will Keep Building Committee Informed

The executive secretary should be the resident committee on the actual building operation. He should be empowered to authorize emergency changes in the plans, which frequently must be made without waiting to call a meeting of the committee. On other changes the executive secretary is the natural contact between the architect and the committee, and saves much time for both.

If the project is being erected on a cost plus contract, the building committee should have its own accounting record, which can be kept by the secretary. This cooperative type of contract places certain continuous responsibilities upon the committee, such as checking accounts, authorizing purchases and contracts and approving pay rolls. The committee must be fully advised on these matters at all times. The secretary will establish monthly or semimonthly reports, both financial and constructional, so that the committee will at all times be fully informed as to the financial liability incurred and also the progress that is being made on the project.

I have stressed the importance of the executive secretary because the position is rather a new one and is not entirely understood as yet. I know architects who at first opposed the executive secretary plan, but who after operating under the system found it highly satisfactory.

The selection of the consultant is an important matter and one that must be considered carefully before a decision is reached. The consultant's place in the organization is made necessary because of the technical nature of a hospital. The hospital is not only a building but it is also a machine—a machine made up of mechanical and

human elements. The consultant should be a person who has demonstrated his ability to harmonize the mechanical and human elements as the operative head of a modern hospital, and should also have an extensive knowledge of methods used successfully by hospitals other than those with which he has been associated. The position should be filled by a person who is capable of cooperating with the various heads of the hospital in the matter of incorporating their suggestions into the building plans.

Engineers Should Understand Hospital Design

The architect should be selected upon much the same basis as the consultant. He should be experienced in hospital work and should understand the operation of a hospital. It is necessary for the architect to carry on after the consultant has completed his work and, in order to develop an efficient building, the architect must understand hospital practice. While the architect should control the engineers, it is advisable that the committee investigate the qualifications of the engineers before a selection is made. An architect usually has several engineers with whom he works and the committee should have a voice in the selection.

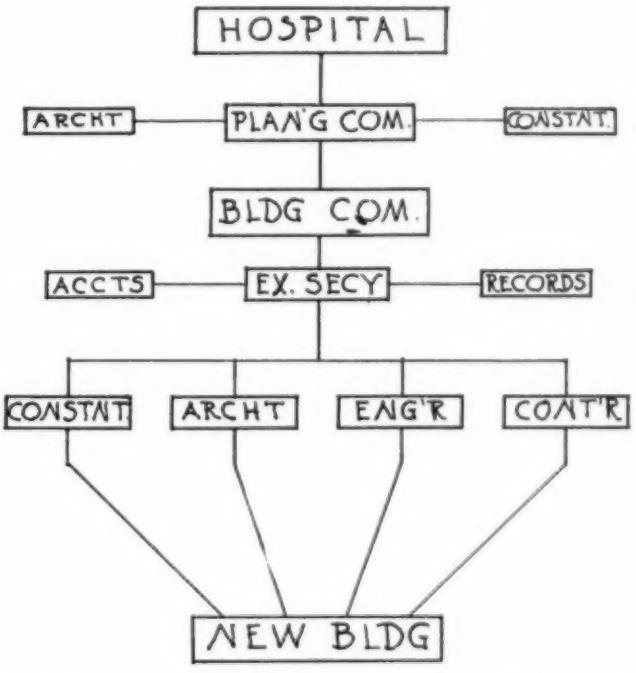
The engineers selected should be experienced in hospital design. They must be familiar with the complicated electrical requirements of a hospital, its requirements in the matter of soft and hard water, its needs in the control of high, low and medium pressure steam, and its requirements in the matter of filtration of air and humidification.

Competitive bidding is the usual method of selecting the contractor, which ordinarily leads to awarding the contract to the lowest bidder. Unless the building committee is particularly well versed in building operations, it will naturally presume that the architect's plans and specifications are complete and absolute. This is never the case, however, and this is said with no thought of criticizing the architect. It is the natural condition from the way in which the architect must work. He must develop drawings from imagination to produce a final structure that is complete in every respect, and the harmonizing of so many different trades is too complicated for absolute perfection. Then, too, the grading of material is by large, general classifications, and one contractor will specify the best of a grade, and another the lowest of the same grade.

The best method of selecting the contractor is to follow the same system used in selecting the architect. The contractor should be selected at the same time as the architect. The contractor can advise the committee on costs, can recommend materials, can aid in planning details and can help the architect in his work. This method will eliminate many disagreeable delays, particularly those caused by cost overruns. With this method of selecting the contractor it is possible to start building about three months sooner than with the competitive bidding system.

In the process of making the working drawings and specifications, the final result is developed from diagram sketches, to departmental sketches, to small complete sketches and so on, by gradual steps, to the end that all drawings and specifications are complete. Copies of the finished plans and specifications, if the competitive bidding method is used, are then placed in the hands of the bidders. The contractors are then allowed about a month to arrange their bids. It frequently happens that all the bids are too high, and some system of reducing the cost must be devised. The whole procedure may take several months.

The selected contractor, however, will keep the architects and owners advised at all times of the



cost of the work as designed, so that no delay is caused. It is not necessary that all of the drawings be completed before the excavation can start; steel can be ordered and contracts let for other materials.

As low a cost can be secured by the selected contractor process as by bidding. In the first place, all men are not of the same capacity. Some contractors build better than others, and in a hospital the best type of work is needed in order to avoid high maintenance costs. The selected contractor should be given some type of cooperative contract, such as a savings sharing arrangement. This will induce the contractor's personnel to

watch for economies. It will be found for a given quality of building that the selected contractor usually can buy better than the lowest bidder, and that the only noncompetitive cost of a building lies in the 10 per cent of the total cost, which is the general contractor's labor cost. The better the contractor the better labor he will employ. It follows that the labor cost under such a contractor will yield the best result per dollar. The 10 per cent is arrived at by assuming that the general contractor will perform about 20 per cent of the work with his own men, subletting the balance, and that 50 per cent of his work is in labor.

A second group, a planning committee, is often helpful if a large project is contemplated. The time required to plan, design and detail a large project is usually as great as the time needed for actual construction. It is not unusual for each operation to extend over a period of two years. Under such conditions, it has often been found advantageous to have a planning committee specify the general arrangement of the building, the departments that are to be provided for and the location and the area to be given each department. The building committee then picks up the work and carries on the actual construction activities from that point.

This has proved a most satisfactory arrangement. It conserves the time of the building committee and also allows of a committee on planning made up of the more technically minded and trained members of the hospital group. The difficulty has been to restrict cost and also to build within the budget, but with interlocking committees and with the contractor to check the costs as the drawings progress, this should not be a difficult matter.

If the two-committee system is adopted, it is a good plan to make the chairman or some member of the planning committee a member of the building committee. It also is advantageous for the one executive secretary to serve both committees. With this arrangement the members of the final committee are made familiar with the technicalities of the work that was done by the first committee.

When the planning committee has completed its architectural work it should consider the equipment problem. The purchase of equipment is a serious matter and should not be left until the last moment. It is a particularly difficult problem when certain pieces of the old equipment must be used in the new building, and if this is given serious study considerable economy will surely result.

Cutting Heating Costs in the Hospital

By EDWARD S. BABCOX
President, Peoples Hospital, Akron, Ohio

A saving of 30 per cent in fuel costs is expected as a result of changes that have been effected recently at the Peoples Hospital, Akron, Ohio. In addition to reducing fuel costs, the changes that have been made are expected to lower the cost of upkeep on the heating plant and also to provide a more even distribution of heat throughout the entire hospital. The changes were instigated at the direction of the house committee.

The first change made was in the quality of fuel used, a better grade being purchased. Competitive bids were taken on the fuel. When the house committee started its investigation the hospital was paying $2.60 a ton for coal, and now a much better grade of coal is being used at a cost of only $1.75 a ton. Not only is the price lower, but the better quality of the new coal ensures a saving in the quantity used.

With the poor quality of coal that was formerly used it was practically impossible for water to circulate properly around the boiler tubes. The new grade of coal corrected this difficulty.

The services of an expert heating engineer were then secured and at his suggestion a large number of the traps were replaced so as to prevent the live steam from returning to the boilers. It was also found expedient to repair and replace a number of the pressure regulating valves.

It is the opinion of our house committee that a thorough inspection should be made of the heating plant approximately every sixty days. This may be done in connection with the inspection by the insurance company or state inspector, or the house committee can make its own inspection. Necessary repair work noted at the time of the inspection should be carried out promptly. The members of the house committee feel that better results are obtained by a personal inspection than by accepting verbal reports on the condition of the plant from the engineers.

Why Occupational Therapy in Military Hospitals?

Of what advantage or use is occupational therapy in military hospitals? Is it a display of pretty objects made by sick men to show admiring visitors? Or is there a real reason and value backing its existence?

These questions were answered by Capt. H. M. Nicholson, medical corps, U. S. Army, at the sixteenth annual meeting of the American Occupational Therapy Association. Captain Nicholson said that occupational therapy in the military hospitals serves as an adjunct to medicine and surgery:

First, by stimulating and strengthening the natural and recuperative power of the human organism.

Second, by providing a constructive outlet for the natural reaction against long hospitalization, and adding materially to the patient's cooperation with the work of the physician.

Third, by supplying an outside interest instead of allowing the patient to concentrate upon his injury and pain.

Fourth, by supplying a stimulus for voluntary curative exercises for diseased or injured joints, muscles and nerves.

A Service Survey Must Not Ignore the Abstract Factors*

By JOSEPH C. DOANE, M.D.
Medical Director, Jewish Hospital, Philadelphia

COST of conducting the hospital is constantly under scrutiny. Accurate computations are made of the expense involved in rendering every type of service. In institutions maintaining adequate bookkeeping systems it is possible to compute accurately the cost of the various physical operations of the hospital, and efforts are frequently made to determine the expense of performing a single operation, of administering an hour's anesthesia or of caring for each dispensary patient. Detailed computations are also of great value in detecting the existence of possible extravagances in the laundry and in the mechanical department.

In the dietary department not only the daily expense of raw food per patient, but also the cost of preparation and serving should be computed for the guidance of the governing body. The cost per capita per patient day represents the sum total of all of these items. No institution should be content with the usual figure secured by dividing the total gross expenditure by the total number of patient days. Indeed, the average costs per capita as published in annual hospital reports are more often inaccurate than truly representative of the expense of caring for each patient for a day, a month or a year.

Total Income Is Difficult to Estimate

It is possible, of course, to expend time and effort extravagantly in conducting the cost accounting system of an institution. Some superintendents, when they have accurately divided their total daily expense into its component parts, figuratively rest on their oars. They are content with knowing and make little effort to utilize such computations. So long as these gross inaccuracies are allowed to creep into institutional bookkeeping systems, it will be impossible to draw any comparative conclusions of real use. On the other hand, the superintendent who fully acquaints himself with the details of his departmental expenses and then endeavors to reduce them further by eliminating nonessentials, performs a real service.

Profit or loss in the operation of a commercial enterprise is ascertained by a comparison of the expense of manufacturing an article with the return derived from its sale. The gross profit or loss resulting from such activities, therefore, is computed by comparing total expense with aggregate income. Adopting in part the policies followed in business, the hospital superintendent can compute rather accurately gross expense, but he encounters difficulty in arriving at a reliable estimate of total income. In other words, the result of the year's activity in the management of a hospital, no matter of what size, cannot always be expressed in terms of financial profit or loss.

Contribution of Staff Physicians

The public often takes exception to this statement. To be sure, it is possible to determine total income by the simple addition of all sums received from patients plus various other items derived from endowments, gifts and investments. But the mere comparison of this sum with cost figures gives little idea as to efficiency of operation. This is true because a splendid medical service may be rendered to all patients admitted to the hospital during a twelve-month period, and yet an alarming financial loss may ensue. On the other hand, income and expense figures may more nearly balance, and yet a most ineffective medical and surgical service may have been rendered.

Institutional boards commonly secure the services of skilled accountants to evaluate the methods employed in the purchase, distribution and storage of supplies. Just as frequently such experts direct their attention to fee schedules and collection policies. Occasionally, but not often, boards seriously undertake a service survey designed to learn the end results secured in the care of patients. Moreover, the total expense to the community of conducting a hospital consists not only of the money spent for salaries and supplies, but also the loss sustained when useful men and women become ill. Perhaps this item, if it could be accurately estimated, would far exceed the expense in dollars and cents of carrying on hospital work.

*Practical Administrative Problems series.

Another factor of no little importance enters into the comparison of cost and income figures. The hospital almost never takes into account the financial and humanitarian contribution made by staff physicians in the care of ward patients. This service is too often considered a benefit to the doctor because of the experience he gains. While this is true in a measure, the physician after a few years of hard work gives much more than he gets. If his many visits to ward patients were computed on a financial scale, the hospital would find itself greatly in debt to the doctor and the community would begin to appreciate to a greater degree the full value of the service rendered by its local hospital. Moreover, few persons realize that the many hours of round-making contributed by the physician would require the expenditure of vast sums of money by the patient body if these examinations were to be made in a private medical office. The physician not only contributes his time but in addition he has considerable expense in providing transportation to and from the hospital.

Service Must Be Prompt and Effective

The cost to the patient of being ill has been mentioned. Each day spent unnecessarily in a hospital bed is one day less of earning on the part of the sick man or woman. This loss of earning power is again a community expense. If it were possible to estimate more accurately the average service loss to the community represented by each day spent by the patient in the hospital, then it would be possible to compute more closely the total cost per day to the community of the operation of the hospital.

Enough has been said concerning the broader aspects of the cost of hospital service to warrant the following conclusions: (1) the expense of conducting the hospital is a community outlay of funds because the hospital board is but the fiscal agent of the community, and (2) the loss of the patient's time is an actual loss to his community, especially when the family of the patient is in want and the community must contribute to its support. Unless service to the sick is effective and prompt, it can be condemned as inadequate and extravagant.

In surveying hospital service one immediately encounters an abstract quality difficult of financial evaluation. There is no yardstick capable of measuring the adequacy of hospital treatment. Boards of trustees long have vainly endeavored to evaluate the service secured by the expenditure of the hospital's money. Unless its members are men of vision they will be inclined to individualize, to permit personalities to obscure perspectives and to remember here and there individual victories in the contest with disease. The reader's attention is directed to certain aspects of administrative and scientific work which may point toward the rendition of efficient service or may enable one to detect its absence.

Great effort is expended everywhere throughout the institutional field to conserve everything in the hospital except the patient's time. The attitude of the physician is often that of a very busy individual who cannot believe that other persons are equally busy. He fails to remember that the patient he keeps waiting long hours on a dispensary bench is being kept from gainful employment. An extra day in the hospital means little to the physician, but when this day is multiplied by the total number of patients affected, the cost to the community is enormous. Perhaps the greatest waste of patients' time occurs in the medical and surgical wards. In the former one often observes inexcusable delay in beginning diagnostic studies and therapeutic treatment and in discharging the patient when the hospital's work is completed. It is so easy to forget an important specialty examination or to remember an interesting test and to be convinced that the patient might benefit by staying added days or weeks for further observation.

A board member may learn much by surveying hospital charts and noting the comparative speed and intelligence with which studies are begun and treatments instituted. Speed with safety to the patient is a splendid characteristic of the wide-awake medical service, and yet it is impossible to compare the accuracy of the reasoning of various physicians. False conclusions may be drawn because shoddy diagnostic studies have been made. A hospital stay may be absolutely worthless to the patient because of lack of zeal and intelligence in deciding upon the necessary laboratory studies. Failure to draw definite conclusions, to bring to a point the details of a difficult case, indicates cloudy thinking and loss of time and money if not the life of the patient.

Individual Reactions of Patients

Nor is it possible always to decide as to the relative percentage of cure which has resulted from hospital care. Individual reactions to disease and the resistive reserve powers of the patient are intangible factors that do not lend themselves to careful analysis. Patient A may recover from pneumonia in three weeks and return to earning power in less than a month. Patient B, with no more serious infection, may leave the hospital with a shattered nervous system and with an undue fear of overtaxing himself which prevents his reentering gainful activity for some time. The physician cannot be blamed for lack of ther-

apeutic intelligence or for errors of judgment if patient B instead of patient A occupies a bed on his service. Moreover, it is with the greatest difficulty that relative pathologic involvements are determined in various patients, nor can an accurate estimate be made as to the tissue restitution resulting from treatment. In the last analysis, when a life is lost in the medical ward, who can say whether it might have been saved had the patient been in charge of another physician? To be sure, the time spent in study by the doctor in charge and his intelligence in prescribing and in following day by day the results of this treatment are not altogether without use in learning the cause of death. On the other hand, there are those who adopt a policy of masterful inactivity and succeed when a meddlesome pragmatism might have failed.

Ward Records Should Be Studied

So it may be said that mortality figures, particularly in the medical wards, are a difficult and often dangerous index of the type of treatment rendered. When a large percentage of ward deaths can be surveyed at the postmortem table, the adequacy of antemortem study and treatment can usually be evaluated with no little degree of accuracy. Members of the hospital board have a right, therefore, to demand such information as the average length of stay of ward patients, the number of visits or even hours of study contributed by the physician, the avidity with which the physician seeks to compare antemortem and postmortem diagnoses and the general institutional interest displayed by the visiting chief.

A service survey of the medical wards should contain these facts and yet many intangible qualities must be considered when an attempt is made to draw conclusions therefrom. Too brief a hospital stay by the patient is not always the manifestation of virtue on the part of the chief. To discharge a lobar pneumonia case or a patient with decompensated aortic disease after too short a stay in the hospital is an example of lack of judgment mentioned only to be condemned. From the standpoint of the patient, it is difficult indeed for an employer to estimate the relative diminution of his usefulness following an illness. This is true because there enter here such intangible after effects as damaged morale with or without actual physical incapacity.

The discussion of the attributes of good medical ward service should not be concluded without reference to the usefulness of surveying ward records as a means of ascertaining the absence or presence of an orderly approach to the diagnosis and treatment of each patient admitted. On the other hand, mere sheets of paper containing more or less accurate and readable statements in regard to a patient may be of great value or of no practical use, depending entirely upon the truth of these observations. Only the physician who is capable of comparing chart statements with actual evidences of disease is able to estimate the value of such histories.

There is another abstract but valuable by-product of ward activities. Unless the teaching atmosphere of ward work is kept at its highest level, a very real possibility of adding to the credit side of the ward ledger will have been lost. It is impossible to estimate the financial value to nurses, interns and visiting physicians of the knowledge they secure from treating sick persons. To include this item definitely, therefore, when one is seeking to learn whether the hospital has been conducted at a profit or at a loss, is not feasible. Enough has been said about the work of the medical department to warrant the conclusion that any statement of hospital income falls far short of accuracy unless it takes into consideration the value of the patient's time, the return which teaching brings, the comparative percentage of restoration to normal physical and mental functioning resulting from treatment, and the speed with which the patient regains his earning power.

In the surgical ward a survey of service rendered is somewhat less difficult. The speed with which operations are performed following admission is sometimes an index of good surgical work. Too great haste in bringing a patient to the operating table is often followed by a more or less prolonged convalescence. The MODERN HOSPITAL has frequently emphasized the advisability, even the indispensability, of careful preoperative studies. It has stressed the importance to the surgeon of specialty consultations and has endeavored to emphasize the dangerous and disastrous after effects of precipitate surgery.

Difficulties in the Surgical Ward

It is impossible to do more than estimate the value of a human life to a community. But it is proper to remark that a patient partially incapacitated by an ailment which does not lend itself to correction by the surgeon's knife is of much greater use to his family from a cold economic standpoint alone than a patient still further incapacitated by unsuccessful surgical treatment. Infections are disastrous and highly expensive. The practice of an improper surgical technique resulting in a prolonged hospital stay following surgical treatment is akin to criminality. A surgical operation complicated by pneumonia is a tragedy sometimes to be prevented by a careful physical examination prior to operation.

Thus a comparative study of morbidity statistics gleaned from the experience of the surgical ward frequently reveals much information concerning the proficiency and good judgment of the surgeon. It is true that apparently unavoidable complications sometimes follow. The surgeon who persists, however, in unduly hastening operations or in performing too many exploratory incisions is one to be avoided. Moreover, the surgeon who spurns the aid of the internist, who believes that a successful attack on a diseased organ does not require first of all a careful survey of the condition of other organs, is often a menace to the patient. It is surprising that there are still surgeons who believe that the contribution of the laboratorian is of minimum importance. The same difficulties exist in the surgical wards which have been enumerated in discussing the medical department. Loss of morale is often as incapacitating as a limitation in the use of limbs, and there are mental as well as surgical cripples. Mental cripples are often more difficult to restore to normalcy than surgical cripples.

Good Judgment Is Essential

The board of trustees should have placed before it in summary such statistics as the average length of stay of the patient in the surgical ward, the number of infections, laboratory conclusions as to the actual presence of disease, morbidity statistics following operation and the zeal with which the surgeon consults his colleagues from other services. In this day and age it is impossible for any one individual to be fully acquainted with the intricacies of all the specialties. The surgeon who apparently believes that his learning and manual dexterity are sufficient to meet every situation belongs to a bygone age. The dramatics of surgery should not be permitted to cloud the vision of the inquiring trustee as to the adequacy of the surgeon. Many persons feel that the mechanics of surgery can be more easily mastered than the difficulties of diagnosis which present themselves before any physical effort has been made at a cure. Surgical technique, changing every day, is considered by many persons to be of less importance to the patient than careful diagnosis. Unfortunately the latter statement is rarely fully appreciated.

This article will not attempt to describe in any detail the signs of good nose and throat, genitourinary, orthopedic or ophthalmologic work. The removal of tonsils, however, is not the minor procedure some persons would have us believe. Moreover, it has been said that it is fortunate indeed that the tonsillar fossae, not always innocent of lymphatic tissue following a supposed enucleation, are not easily inspected by the public or the patient. Lack of good judgment is as devastating in these specialties as in the general surgical wards. Prolonged hospitalization results from the infection of bone by a clumsy or unfortunate orthopedist. The loss of an eye due to infection is a tragedy.

A Humanitarian Attitude Should Prevail

The board of trustees has a right to demand from its medical advisory body the fullest information concerning such unfortunate happenings. The cloud of secrecy sometimes drawn about instances of this sort should be torn away and the board in every instance should be in possession of the facts. The service rendered by the surgical department includes more than a financial return to the hospital in patients' fees. To determine its efficiency one should also study the speed of the patients' return to usefulness and, if possible, the relative percentage of physical and spiritual restitution.

In the pediatric service various items included in the treatment of adult patients are conspicuous by their absence. Children have no present earning power. Their financial and spiritual value to the community are matters the future must evaluate. The treatment of children, however, must be no less effective than that of adults.

It will be noted that humanitarian attributes have been rarely mentioned in this discussion. Kindness, thoughfulness and the prompt relief of pain and distress are qualities which should without fail exist in every hospital. Morbidity and mortality statistics are as difficult to evaluate in the children's ward as in the adult wards. A return to health is governed here, as everywhere else, by the resistance of the patient, the virulence of the disease and the skill of the physician. In the pediatric department it is particularly difficult for the board of trustees to maintain a judicial attitude in evaluating results. The surveyor is inclined to remember that the patient is a helpless child, and that he was or was not returned to health.

Profit or Loss?

This article has fulfilled its purpose if it has drawn attention to the necessity of surveying service as well as supplies in order to ascertain whether the community's money has been well spent and whether the hospital has been actually operated at a profit or at a loss. Most institutions, although they announce a greater or lesser financial loss, have in reality been operated at a profit to the community if it were possible to evaluate financially the more or less abstract by-products of their activities.

The Problem of the Month

Should T.B. Patients Be Accepted in the General Hospital?

THE opening of general hospitals to tuberculous patients is now advocated by some authorities and it seems that in the light of twentieth century knowledge concerning the methods by which contagious diseases are disseminated, this practice may be more widely adopted.

Newer methods of therapy and surgical methods necessary in the treatment of some forms of tuberculosis require resources beyond the reach of the average sanatorium. The American Medical Association, the American Hospital Association and the National Tuberculosis Association have gone on record as being in favor of supplementing provisions for patients in sanatoriums with tuberculosis wards in general hospitals.

In support of such a policy it is argued that in many small cities two hospitals, one general and one tuberculosis, are being run at a loss but if combined would pay operating expenses. It is also held that the result of opening general hospitals to such patients would be in line with the medical tendency of the day in that it would encourage preventive measures for patients of moderate means who cannot afford a sanatorium stay at a distance from their homes.

Do you favor the inclusion of tuberculosis beds in the general hospital? What disadvantages occur to you as likely to develop from the pursuance of such a policy?

Dr. George Thomas Palmer, Medical Director, Palmer Sanatorium, Springfield, Ill.:

"All things considered, the answer to this question is in the affirmative, subject to certain qualifications. Hospitals should have some tuberculous patients so that their interns and nurses may have at least a limited experience with this very common disease, whose management differs radically from that of most other diseases. As a matter of economy, major surgery of the tuberculous should be done in general hospitals. This applies both to chest surgery and to general surgery of tuberculous persons. If tuberculous patients are to be kept in general hospitals beyond an emergency period, there should be modifications in hospital operation as to food, quiet, rest and general routine and some of the hospital personnel should be trained in the methods employed in the better class of sanatoriums.

"The tuberculous patients should be isolated or quartered in their own section, partly on account of the fear of infection or the real danger of infection, but also so that they may be protected from the disturbing activities common in general hospitals. Every tuberculous patient should be subjected to uniform rules and routine, regardless of the opinion of the individual physician under whose care he may come. This means that tuberculous patients should be regarded as patients of the hospital rather than as patients of individual or private physicians."

Dr. D. L. Richardson, Superintendent, Charles V. Chapin Hospital, Providence, R. I.:

"For some years there has been considerable talk about admitting tuberculous patients to local general hospitals, particularly those whose illness is far advanced. The earlier hospitals for tuberculosis were designed primarily for patients with the disease in the earlier stages, and then hospitalization of the more advanced cases was advised for reasons of poverty of these patients and to avoid family infection. These patients objected to going far from home to a sanatorium. They wanted to be near home, particularly if they thought they were going to die, and I understand that this is one of the reasons for the suggestion that the local hospitals take care of them.

"It seems to me a logical and economical plan. In the first place, it would help to increase the percentage of hospitalization for tuberculous patients, particularly for advanced cases, who naturally are the greatest menace, and it makes provision for their care during the latter days of their lives. It provides also for the education of physicians, interns and nurses many of whom learn little or

nothing about pulmonary tuberculosis in their general training. It is more economical to pay the local hospital to take care of these patients than to build a special hospital. In fact, the community might be so small that it could not afford to build a hospital for them, while it would be quite possible for a local hospital to take care of a limited number of tuberculous patients, and their care could be paid for by the local community.

"The only objection, and this can be overcome, is the danger of infection of doctors, nurses and even other patients. Of course, many authorities in tuberculosis work have become more or less convinced that infection in tuberculosis hospitals is comparatively slight. I do not agree with this, and there is much evidence to the contrary. A considerable number of young physicians and young nurses are developing tuberculosis and to expose them without proper safeguards is unwise. It has been found in one large institution that about 2 per cent of the graduate nurses working in this hospital develop tuberculosis. For this reason I believe that tuberculous patients should be treated in a separate ward where a careful technique will protect the doctors, the nurses and the other tuberculous patients. The technique, however, does not necessarily have to be quite as rigid as for contagious diseases. By segregating the tuberculous patients in a separate ward they will not endanger the other patients in the hospital, and what is more, their coughing will not annoy the other patients."

Dr. Edward R. Baldwin, Chairman, Executive Committee,
Trudeau Sanatorium, Trudeau, N. Y.:

"While this question has been before the National Tuberculosis Association for a number of years it is apparently no nearer solution now than ever. Meanwhile surgical treatment has come into the field of pulmonary tuberculosis with increasing importance. Surgeons, therefore, who were violently opposed to having a tuberculous patient within gunshot of their hospital service are now embracing every opportunity to get them in. So in a manner the question is settling itself.

"My opinion is that a general hospital is no place for a tuberculous patient after the diagnosis is made. There is, however, need for observation wards or wings for such patients before referring them to special hospitals. I believe that within a few years the larger hospitals for tuberculosis will have ample surgical facilities. Some are already so equipped.

"In any case it is generally detrimental to the reputation of general medical and surgical hospitals to have it known that tuberculous patients are treated therein, even though they may be isolated. Emergency surgery will generally be received without attracting notice, but the systematic treatment of tuberculous patients should, in my judgment, be given in special institutions."

Asa S. Bacon, Superintendent,
Presbyterian Hospital, Chicago:

"It is my opinion that tuberculous patients can be cared for in any well regulated general hospital provided a section of the hospital is set aside for them, or male and female wards are provided for pulmonary patients only. This would do away with any objections that might be raised by other patients, and at the same time would make it much easier for the nurses to care for these patients.

"The Presbyterian Hospital has always taken pulmonary patients in its private rooms for diagnosis and for care until they can be placed in a sanatorium. I am sure that practically all of our hospitals take tuberculous patients for therapy or surgical treatment."

Dr. G. Harvey Agnew, Secretary,
Department of Hospital Service, Canadian Medical Association, Toronto:

"Tuberculous patients may be treated in three places—the home, the sanatorium or the general hospital. Only selected mild cases should be treated at home and often sanatorium facilities are lacking or inadequate. Therefore care in a general hospital is frequently advisable.

"The reasons for treatment in the general hospital's wards or annexes are: (1) the patient is kept nearer home; (2) empty beds are utilized; (3) the overhead is less than for two institutions; (4) modern technique protects the other patients; (5) good training is provided for pupil nurses, interns and students, and (6) nonpulmonary tuberculosis is well treated in orthopedic and other services.

"In Saskatchewan 10 per cent of the beds in all general hospitals are available for tuberculosis. In Nova Scotia, three tuberculosis annexes are proving highly satisfactory.

"However, sanatorium treatment is advocated for the following reasons: (1) medical care usually is more efficient because it is directed by experts, and certain complications are handled better; (2) patients can be taught 'tuberculosis hygiene' better; (3) few general hospitals can isolate the patients properly; (4) there is greater difficulty in protecting the personnel in the general hospital; (5) per diem costs average lower in a sanatorium;

(6) it is easier to maintain an optimistic and tranquil 'atmosphere' in a sanatorium, and the schools and other educational features of a sanatorium are helpful to the patients. The patients feel less neglected in a sanatorium.

"I definitely favor sanatorium care if that is available. However, if the district is too scattered to support a sanatorium large enough to be efficiently equipped, economically administered and staffed by experts, the building of tuberculosis annexes to selected general hospitals is advisable. Moreover, pending removal to a sanatorium, patients should be kept in general hospitals rather than at home."

W. Hamilton Crawford, Superintendent, South Mississippi Infirmary, Hattiesburg, Miss.:

"In view of the modern interpretation of sanitary prophylaxis, especially in its relationship to the management of the patient with pulmonary tuberculosis, it seems practical to care for this group in general hospitals. A candid analysis of the experiences of individual hospitals, however, reveals that in many instances, nurses and other personnel, despite the operation of a seemingly well ordered program, have become victims of the disease.

"Some may say that this should not happen and that its occurrence presupposes an unwholesome interpretation of the fundamentals of institutional management. This may be true, but I submit that even though there are instances where the disease is contracted by the trained personnel, it does not follow that it is due to any delinquency on their part. The real danger arises in some measure from the untrained help, but the greatest source of infection can be traced to the patient who, with reckless abandon, sprays the atmosphere with bacilli while coughing, or is indifferent in the use of sputum cups. Ultimately the patient becomes trained in matters of prophylaxis, but the damage is often wrought during the primer period.

"I believe that the treatment of tuberculous patients in general hospitals would increase rather than reduce the cost to that group.

"In light of the above facts, as well as others that are apparent, it seems to me that the time-honored plan of providing special institutions for tuberculous patients should be followed, except in large hospitals where it is practical to devote an entire building to the treatment of this group."

How Nursing Schools Might Finance Themselves

The school of nursing should be separated from the hospital's purse and should have its own budget. The directress of nursing should be the dean of the school of nursing and should develop its educational program and be responsible for its finances, according to Dr. Lucius R. Wilson, John Sealy Hospital, Galveston, Tex.

The hospital should pay into the school of nursing only money that is earned by the students, and this money should be applied on the cost of operation of the school. The school of nursing should in turn meet all expenses connected with nursing education. To do this an accurate bookkeeping method will be required to prorate the charges to the hospital and to the school of nursing.

The income from student service will not meet all the expenses of the school of nursing and the resultant deficit will have to be met from endowments, taxes and similar sources, in the same way as any other educational unit meets its responsibilities.

The ideal arrangement would be for the school of nursing to have an endowment sufficient to provide for its needs and for the hospital also to have an adequate endowment. The school of nursing could then develop its educational program on its own budget, which would include, with endowment income, the money paid by the hospital for the services of the student nurses, estimated at a fair value, and tuition fees somewhat commensurate with the instruction the students receive. So far as can be seen at the present time, this would greatly simplify many problems though undoubtedly it would bring up others. Few schools and hospitals will attain this goal in the near future, so for the present it is necessary for them to be certain that the hospital gives the student nurses good value for their services and that the students in return give the hospital good service.

Should the Patient Be Required to Sign a Judgment Note?

Hospital administrators are finding it increasingly difficult to collect for private and semiprivate service at the time of the patient's discharge. Usually they receive a promise in such cases that the bills will be settled within a few weeks. Often many months elapse and then only a part of the money owed to the hospital is paid. For some reason the hospital's claims are the last to be met.

In some cases patients are required to produce security upon their discharge, guaranteeing that they will pay their bills. In others, the executive adopts an untenable position of refusing to discharge a patient until his bills are paid. Some interesting experiments have been made along the lines of requiring that a promissory note be signed by a patient before he is permitted to leave the hospital. This scheme appears to have something of merit, and while the hospital should not be placed in the position of an inexorable taskmaster who exacts money from those who are unable to pay, yet it is within its rights in insisting that those who can pay something shall do so. However, the contract that the hospital usually requires the patient or his relatives to sign on admission is far from being one that would stand a legal test.

Editorials

Rejuvenating the Hospital

THE unusually favorable health statistics that most public health agencies are able to show in spite of these depressing times are often explained as a legacy from the prosperous era that came to a close almost four years ago. The health idea had penetrated so far that people are now reaping the benefits of the investment made in better times. There is much truth in this explanation and, by the same token, we shall reap the whirlwind soon if we relax health standards now.

One pillar of the public health movement of today is the modern hospital with all the preventive, educational and investigative machinery that has been added to its routine curative function during our generation. The hospital, like the individual, may expect to enjoy a period of good physical health for a time, as a legacy of the prosperous era. The momentum that we obtained in better times can still carry us along in most instances. But how long will it last? When the time comes to contract activities in the face of support which is progressively declining, how shall we safeguard, among other things, the physical well-being of the hospital?

The tendency to postpone repair work in hospitals unless it is absolutely essential to the vital processes of the institution, is natural at a time when money is scarce. But as no chain is stronger than its weakest link, no hospital is much stronger than its weakest mechanical spot. Those needed repairs that are left undone have a way of becoming aggravated to the point where a disproportionate expenditure may have to be incurred in the future as a result of earlier neglect. It is almost axiomatic to say that buildings kept in good repair save money in the long run. And this is the kind of saving that is worth while. There is none of the "hoarding" psychology about it.

Moreover, social changes taking place around us as a result of the collapse of the recent economic order and changes in the scientific management of disease require physical adjustments of the hospital plant to get maximum efficiency out of it. Remodeling and, in some instances, rejuvenation are part of the adjustment process. The inexorable law of change seems almost to have startled us into action and will compel obedience one way or another.

It is clear that we shall have to keep our plants up-to-date in every respect if we are to be worthy of the confidence placed in us by the contributing public and by the patients whom we serve. We are told on all sides, by economists as well as by statesmen, that this is the best time to get the most out of the money at our disposal. If there is any work to be done this is the best time to do it. It is therefore in the nature of a good investment for the hospital to do essential work on its physical plant and, since the employment of additional people would naturally result, we should have another argument for enlisting the sympathy of the contributing public in the structural problems of the hospital.

Organized Self-Control of Hospitals?

FAR-REACHING readjustments are in the making. Leadership of industry by trade associations is prescribed by the national administration. The country now turns from unrestricted competition enforced by law to a new era of controlled competition initiated by associations operating under the direction of the federal government if the administration's requirements in connection with labor are met. Within limitations business is to be self-regulated, with the government representing the public. In its immediate application this new principle applies to the basic industries which are large employers of labor. It is not contemplated that activities such as hospitals will be involved at the initiative of governmental agencies, but it is possible that they may gain certain protective benefits through their own seeking. There may be opportunity here for national hospital associations to take on broader functions.

It is conceivable that a nationwide chain of hospital councils operating under the leadership or coordinated through the mechanism of the American Hospital Association could bring definite benefits to hospitals as a whole. The formulation of a "Code of Practice" might set up standards for sound hospital operation and define desirable interrelations of the several classes of institutions without discouraging or curtailing the vigor or originality of internal administration to which American hospitals owe most of their progress. Such a code might help solve some of the problems which have confronted hospitals and the medical profession in the past. For example, the need for new hospital facilities in various communities might be determined by those best qualified to judge, and certification of public need sufficient to satisfy the government, the administrator of the act or some other public body be required before a new hospital could be promoted.

The National Industrial Recovery Act was urged by the President and passed by Congress for the purpose of rehabilitating purchasing power by creating more jobs on a living wage basis and to protect industry in meeting the larger pay rolls, through the elimination of unfair competition and overproduction. Its significance to hospitals is not clear, but in these challenging times it may be advisable for an activity so vital to public welfare and national morale to align itself voluntarily with the constructive methods of the government. Pressing problems such as low occupancy, unmet needs such as those of chronic and convalescent cases, cannot be solved in any locality by individual hospitals acting alone and much less by competitive activity of one hospital in respect to another. Co-operation and control will be spelled in larger letters in future, for hospitals as well as for business. Is not the best form of control an organized self-control?

Transfusions

BLOOD transfusions appear to be the vogue in hospital medicine. The public has learned that blood can be transferred from the veins of healthy persons to those of the sick. The lay mind reasons that the blood of those free from disease should be strong and virile in comparison to that of the sick. The physician, after exhausting all known measures to save life, frequently advises a transference of blood as a last resort. In this way he sometimes satisfies his own conscience as well as the minds of relatives that he has done everything within human power to prevent death.

The dramatics of transfusions attract some physicians. In one hospital of 300 beds forty-two transfusions were performed in one month. These procedures purported to relieve conditions ranging from actual septicemia to mild anemias resulting from overwork and unhygienic living. There is no scientific basis to support such wholesale transfer of blood. It is true that the minds of relatives are put at ease in a measure by this procedure and the donor has a certain feeling of pride that he has offered his blood as a therapeutic agent.

There is another angle to this practice which has really become an institutional abuse. The expense of purchasing blood is not insignificant and unless definite scientific reasons require transfusion, public confidence in the physician is abused.

Transfusions have a definite place in the treatment of disease but to yield to the dramatics of the procedure and thus arouse unfounded hopes in the minds of distressed relatives is both unethical and unscientific.

Can Relief Funds Be Used for Hospitalization?

FEDERAL funds to the amount of $500,000,000 have been allotted for welfare relief. Some uncertainty exists as to whether or not any part of these funds can be used for hospitalization purposes.

The American Hospital Association's board of trustees unanimously adopted at a recent meeting a resolution requesting that the government liberalize the rules of the Reconstruction Finance Corporation to the end that hospitals may participate in the benefits of such funds, particularly in the payment for hospital services to the indigent sick. The association has since made strenuous efforts to secure for hospitals the consideration given to other welfare relief activities and to have them reimbursed out of federal funds for welfare purposes.

The law in its language is very liberal and there is nothing in it which would prevent the funds being used to reimburse hospitals for sick relief. Those in authority in the administration of these funds, however, have failed to interpret the law in the manner most desired by the American Hospital Association.

Hospitals throughout the country, and particularly the voluntary hospitals, should as individual institutions support the resolution of the American Hospital Association in an effort to make these funds available to the states for hospitalization.

Shall You Be in Milwaukee?

HESITATING? Don't! You can't afford to be absent from this meeting of meetings to which everyone is coming to talk over present conditions and future trends in the hospital world. Be on hand when the American Hospital Association convention's assembling bell rings and bring with you as many of your staff and as many members of your board of trustees as you can induce to accompany you.

For many things will combine to make this gathering memorable. The year 1933 is one when the need for a convention is particularly apparent —a convention for getting together, comparing notes, assimilating facts and digesting new information. Never has an A. H. A. meeting been planned when the thought of practical helpfulness to members has been grasped more strongly and plans made accordingly. In tangible results the convention will undoubtedly be in the broadest sense productive.

As a convention city Milwaukee rates high. Situated on the shores of Lake Michigan it offers delightful recreation possibilities and it has an enviable reputation for its friendliness in welcoming visitors. Many fine hospitals are there and convention delegates will find much of interest in these institutions. The city's physical arrangements for such a meeting are excellent.

The opportunity to combine attendance at the convention with a visit to A Century of Progress Exposition is one that should be eagerly seized upon. There the world of yesterday, today and tomorrow is on parade. The Fair will offer hospital executives an educational investment that will pay manifold dividends in the years to come. New wonders of science and industry are presented in a setting that is unique.

The institute for hospital administrators that the A. H. A. will hold in Chicago immediately following the convention is another feature that should help in drawing a record attendance to Milwaukee to make the 1933 meeting one of the most vital ever held by the American Hospital Association.

The Ward Patient as a Source of Income

FOR generations hospital doors have swung wide to admit without question all persons needing care who were willing to affirm that they could not meet the expense of treatment. To insist on the payment of a ward fee was considered unethical.

Many persons are willing temporarily to put away pride and thus swell their pocketbooks at the hospital's expense. The hospital of yesterday staggered along somehow under this free load. But a new day has dawned. The private hospital, except in cases of medical or surgical emergency, must collect a fee from ward patients if it is to survive. The public is gradually learning that it must pay at least a moderate fee for hospital care. Many institutions, revived with this unexpected income, are able to carry on where otherwise they would have been forced to close their doors.

It is neither unwise nor unjust to require that ward beds support themselves whenever possible. No longer will a foolish, sentimental attitude of indifference be tolerated in the hospital. The purse of big philanthropy is empty. The public has learned the lesson of self-support and will not be disconcerted when the hospital insists on payment of part or all of the expense of treatment in the institution.

Nursing Schools Are Changing Their Policies

MANY persons are of the opinion that a new era is dawning in nursing educational methods. Perhaps no force has done more to focus attention upon the aims and trends of nurses' training schools than the present economic difficulties of hospitals. Many hospital boards of trustees are convinced that the expense of educating the nurse should not rest entirely with the contributing community.

The impossibility of continuing indefinitely to meet these costs is a situation confronting the majority of trustees. That the educational pendulum has swung too far toward the goal of high pedagogic standards is the conviction of others. While this group does not belittle the value of theoretical instruction, yet it strongly emphasizes the necessity for watching the cost. There are few who will not agree that it is comparatively easy today to secure probationary applicants. Competition among neighboring schools is less acute than formerly because there are now sufficient nurses for all the schools. This condition suggests that the inducements formerly needed to fill the rosters of nursing schools can be discarded. De luxe homes, honoraria and social attractions can and should give way to the attractions of a high grade professional education.

Indications are that in the near future a growing number of schools will successfully conduct courses for nurses for which a considerable fee will be charged. There is little necessity even now for hospitals that are seriously endeavoring to educate the nurse properly to pay out thousands of dollars annually for the salaries of pupils. In institutions with adequately staffed wards the service rendered by the student nurse and the value of the instruction she receives should balance each other. Many hospitals are discontinuing the practice of paying student nurses. This policy is fair provided high educational standards are being maintained. The centralization of instruction facilities so as to conserve the time of the instructors will perhaps be the next step toward economy and efficiency in nursing education.

To reduce the cost of conducting nursing schools is an absolute necessity in many hospitals. The rights of the patient should be given careful consideration in a move of this kind. Leaders of the nursing profession should not oppose the adoption of such a course by hospitals provided the welfare of the patient is safeguarded. The welfare of the sick still is safe in the hands of the country's splendid body of hospital trustees.

Maintenance, Operation and Equipment

Are Chemicals Needed in Sterilizing Instruments by Boiling?

By S. T. MARTIN
Assistant Superintendent, Regina General Hospital, Regina, Sask.

THE technique used in the sterilizing of instruments is a matter on which many hospitals differ, particularly as to the benefits to be derived from the addition of chemicals to the water used for the boiling of the instruments.

An article entitled "How Surgical Equipment Is Sterilized," which appeared in the January, 1932, number of The MODERN HOSPITAL, described the sterilizing methods used in over a hundred leading hospitals. That portion of the article dealing with the use of chemicals in the boiling of instruments was of particular interest to the Regina General Hospital, because the members of our staff have long been divided on this question.

It was found that only twelve of the hospitals that answered the questionnaire used either soda carbonate or soda bicarbonate, while eleven reported using a proprietary sterilizing tablet or mineral filtration apparatus to prevent instruments from rusting while being boiled. The article suggests, therefore, "that it is not believed necessary to employ soda or other chemicals in the water in which instruments are boiled."

A member of the attending staff of Regina General Hospital who is especially interested in this question has in his possession a pair of scissors that was in constant use in his office for eighteen years. The scissors had been boiled almost daily in a soda solution and had never been sharpened. On examination it showed absolutely no sign of rusting and the edges were in excellent condition.

Nine Experiments Were Carried Out

To gain further information on this question a number of experiments on sterilizing methods were carried out. New instruments were used for each experiment in almost every case. The instruments used were a tonsil scissors, a scalpel and a hemostat. They were boiled for ten minutes and were then placed on a dry towel to cool.

Experiment No. 1: The instruments were boiled in distilled water and all of them showed considerable rusting; in fact, the rusting became apparent during the boiling process.

Experiment No. 2: This experiment was carried out in the same way as No. 1, except that water softened by the zeolite process was used in place of distilled water. The results were exactly the same as in experiment No. 1.

Experiment No. 3: Regular tap water was used. This water is very hard, having about 40 grains of hardness. The instruments rusted to a considerable degree, but not so much as did those used in the first and second experiments. The instruments showed some alkali deposit, which seemed to protect them.

No Sign of Rusting

Experiment No. 4: Plain tap water was used, but it was boiled vigorously for ten minutes before the instruments were immersed. There was little evidence of rusting.

Experiment No. 5: Plain tap water was used, to which soda carbonate (one ounce to the gallon) was added. The instruments were boiled repeatedly with positively no sign of rusting. They were heavily coated with alkali which was easily washed off.

Experiment No. 6: Plain tap water was used, to which soda bicarbonate was added to make a 1 per cent solution. There was no sign of rusting and the instruments became coated with alkali.

Experiment No. 7: Distilled water was used, to which was added a soda carbonate solution. No evidence of rusting was found.

Experiment No. 8: Regular tap water was used, to which soda carbonate was added. The instruments used were those showing signs of rusting from previous experiments, as well as several discarded instruments on which the plating was in poor condition. They were first cleaned of free rust and boiled for ten minutes. Absolutely no sign of fresh rust appeared. In fact, the old instruments took on a polished appearance.

Experiment No. 9: The instruments used in

Experiment No. 5 were washed and placed in ordinary tap water. Rust did not appear until the third boiling.

A pronounced stain on the scalpel blades and on the scissors blades was noticed in the experiments in which no soda was used. This stain could not be completely removed even by using an abrasive. On the other hand, the stain on the blades of those instruments boiled in soda was removed easily.

The following conclusions have been reached:

The addition of soda carbonate to water used for sterilizing instruments has a definite beneficial action in preventing rust and staining.

Water that has been vigorously boiled before the instruments are added has at least a retarding action on rust formation.

The hardness of our water causes a heavy scale to form on the heating coils and on the bottom and sides of our instrument sterilizers, which materially retards the heating of the coils. It has been found necessary to remove this scale every ten days or two weeks. This is done by adding commercial hydrochloric acid to the sterilizer half filled with water to make a 5 per cent solution, and by boiling vigorously until the scale softens.

Adding soda to the sterilizers has a beneficial effect. Either the deposit is less hard or the greater part of it is thrown down in a sludge which can be washed down the drain, thus leaving less to be dissolved by the acid treatment.

Protecting Business Mail

The experience of business concerns suggests that even hospitals, despite the professional type of personnel employed, might find it desirable to protect themselves against complications resulting from mail intended for the institution being diverted because of having been addressed to a former employee.

For instance, the Post Office Department at Chicago holds that mail addressed to a business concern, hospital or other institution, but carrying the name of an individual, is regarded as the personal mail to which the individual is entitled and is subject to his forwarding order. This does not apply, however, where the mail is marked merely for the attention of an individual or where the individual is addressed by a business title such as superintendent, engineer, secretary.

The protection open to the hospital is what the Post Office Department terms a Mail Release and if it is desired to have such Mail Release executed by an individual, the local postmaster should be consulted with reference to its form.

An Invalid Lifter That Aids in Handling Patients

The lifting and carrying of heavy or helpless patients is greatly facilitated by the use of an invalid lifter that is essentially a sturdy movable crane for hoisting a Bradford frame or canvas handling sling. The Bradford frame may be placed on a wheel chair truck to which it is easily and securely clamped. The canvas sling may be used in a similar manner to lower the patient into a chair. Either the frame or the sling may be left suspended from the lifter without any danger of tipping the apparatus.

The lifter is made of heavy steel tubing that has been given an aluminum finish, and the frame is carried on five-inch rubber tired casters for easy movement. A heavy roller chain, operated by a worm and gear mechanism, is used as the hoisting medium. The crank operated gear and chain works slowly so that there is no possibility of jarring or jerking the patient. It turns easily enough for one nurse to lift and transfer a heavy helpless patient from bed to bed, or from room to room.

The special folding Bradford frame is so constructed that the patient may be supported in a sitting or reclining position. Six chains attached to the hoist are hooked to the frame in such relation to each other that the patient will remain at any reclining angle desired.

The wheel chair truck is constructed to carry the special Bradford frame so that it is possible to lock the frame at any angle.

The canvas handling sling is connected to the hoist by six chains in such a manner that the patient is first raised to a comfortable sitting position, then lifted and deposited in his chair.

Dietetics and Institutional Food Service

Conducted by ANNA E. BOLLER, Central Free Dispensary at Rush Medical College, Chicago

Metabolism Division Serves Both Patients and Students

By DOROTHY DUCKLES
Assistant in Dietotherapy, Washington University Schools of Medicine and Nursing, St. Louis, and
EUGENIA MARTIN SHRADER
Formerly Chief Dietitian, Barnes Hospital, St. Louis

THE new Tirrill Metabolism Division of Barnes Hospital, St. Louis, is the outgrowth of plans extending over many years. It finally became a reality through the generosity of Mrs. Jacob Porter Tirrill, who established it as a memorial to her husband. It is a center for teaching of diet therapy to patients, nurses, dietitians, medical students and interns. In its wards and private rooms a limited number of patients may receive a maximum of individual care and attention. The complete equipment and the large and unusually well trained staff permit extremely accurate determinations of diet and the most satisfactory type of metabolic research.

The metabolism unit, as may be seen from the accompanying plan, consists of two wards, two private rooms, a centrally placed nurses' station, a commodious and convenient utility and linen room and an attractive kitchen. There are also a clinical laboratory, a large research laboratory and a room used for basal metabolic determinations. The physician in charge of the division has his office adjoining the research laboratory. Since the plan was drawn an extra bed has been added to each ward, so that now they contain six beds each instead of five as shown in the plan.

Personnel of the metabolism division includes the physician in charge, two chemists, an intern, a graduate head nurse, a dietitian, a student dietitian and nine student nurses. The graduate nurse supervises all nursing care in the wards, and the dietitian supervises the preparation of food in the kitchen and the calculation of diets.

The kitchen is completely equipped and conven-

A feature of the Tirrill Metabolism Division is its modern and conveniently arranged kitchen. The trays are served from laboratory tables near the exit. Student nurses and student dietitians carry the trays directly to the patients.

iently arranged. Laboratory tables from which trays are served are placed near the exit leading to the hall which connects the wards. Student nurses and student dietitians carry the trays directly to the patients, thus encouraging pride in the attractiveness of the trays and the palatability of food. The opposite end of the kitchen is the maids' unit. It contains a stove, cupboards and a scullery. Ambulatory patients and those who are not admitted to the hospital, but who come for basal metabolism tests may be served breakfast in the breakfast nook. At other times this nook is frequently used for the calculation of diets.

Patients in the private pavilion and those in the wards who present special problems may receive

diets from the metabolism kitchen. Diabetic, nephritic, allergic, ketogenic and specially constructed diets are served and afford students wide variety in their training.

The metabolism division offers students of the Washington University Schools of Medicine and Nursing valuable information and experience in dietary treatment. Student nurses receive two months of their training in this department. During the first two weeks, which they spend on the wards, they become acquainted with the food habits of patients and learn what regulations are necessary and advisable. The next month is spent in the kitchen. They are taught how to calculate, prepare and serve the different types of diets. All of their work is supervised and checked for accuracy. Classes are conducted so that their practical training is closely correlated with theoretical teaching. After this period in the kitchen, the nurses return to the wards for their senior work on evening and night duty.

Student dietitians also receive five weeks' training in the metabolism division. They spend the first week in the kitchen weighing food and serving trays. This time seems to be well spent since it gives the students an excellent opportunity to become acquainted with the quantitative aspect of calculated diets and to study the psychic reactions of various patients to different kinds of food. The remainder of their time is spent calculating diets, attending classes and clinics, doing experimental cooking and visiting patients on ward rounds with the doctors and the dietitian.

Each intern spends two months on the metabolism service. He assumes responsibility for the medical care of the patients under the direction of the physician in charge.

Medical students are also taught in the metabolism division, both in the wards and in the kitchen, where special recipes are demonstrated. Classes in diet therapy are conducted and trays are set up to illustrate the various lectures.

Patients Given Careful Instruction

One of the most important phases of teaching is that conducted for patients by the student dietitians and nurses. For example, diabetic patients work in the kitchen, where they are taught the quantitative measurement of foods and principles of cooking. Patients not sufficiently intelligent to learn to calculate diets in grams from percentages or patients whose diabetes is mild are taught to measure their food by what has been called the "teaspoon-cup method." This method is comparatively simple and is often sufficiently accurate for practical purposes. Patients are given skeleton diets instructing them in regard to the quantities of meat, milk, milk products and eggs to include in their diets. The skeleton diets cover the protein and fat allotted according to the diet orders.

Patients are then taught that they may spend a certain number of teaspoonfuls of sugar for the carbohydrate-containing foods. Since there are four grams in a teaspoon, the diet lists arrange fruits and vegetables into 4, 8, 12, 16 and 20 per cent groups. Thus a patient on a diet order of 100 grams of carbohydrate would receive twenty-five teaspoonfuls of sugar daily in the form of fruits, vegetables, cereals and bread or bread substitutes. In spending this sugar, he may be economical or extravagant, spending it for concentrated foods and receiving less bulk for his sugar, or spending it for 4 and 8 per cent foods and greater bulk.

The patient is taught to calculate his diet by whatever method is deemed advisable. Diets are checked, prepared and the trays actually served to patients who may come to the kitchen and prepare part or all of the food under the direction of the students and the dietitian. In this way the importance of accuracy is duly impressed on the patients.

"You're Safe With Ry-Krisp Wafers—They Contain No Milk, Eggs or Wheat"

PATIENTS sensitive to wheat, eggs, milk or a combination of the three find it far less difficult to adhere to the diet you prescribe when you include Ry-Krisp Whole Rye Wafers.

Ry-Krisp Wafers are perfectly *safe* for patients sensitive to one or all of these three foods. They are simply whole flaked rye, water and a dash of salt—double baked to bring out the full flavor of the rye and insure lasting crispness.

These wafers have a tempting crispness—a distinctive flavor that is equally inviting at breakfast, lunch or dinner. Because they *taste so good* Ry-Krisp Wafers enhance the appetite appeal of as many foods as the patient's diet permits.

To assist patients in planning interesting menus — a booklet has been prepared by reputable authorities on allergy. All information is presented simply and concisely. Separate sections are allotted to wheat, eggs and milk, and sample menus and recipes are included.

A copy of this booklet and a package of Ry-Krisp Whole Rye Wafers for testing will be sent to you upon request. Additional copies for distribution among your patients are also available. Simply fill out the coupon and mail it to us.

ACCEPTED AMERICAN MEDICAL ASSN. Committee on Foods

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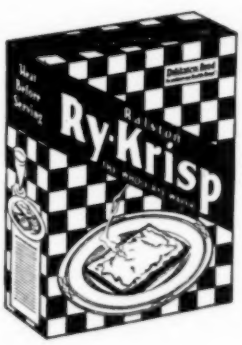

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Offer limited to residents of the United States and Canada.

The excellent facilities of the Tirrill Metabolism Division will be used for the advancement as well as the dissemination of medical knowledge, and there is justification, from a broad point of view, for considering research one of the most important functions of the division. Adequate metabolic study of patients requires more careful and accurate observation than can be obtained in the usual hospital wards. In extensive investigations perfection of chemical methods would be of no avail if there were any doubt concerning the exact administration of diets or the quantitative collection of excreta. It is therefore of the utmost importance to transfer patients for special study to this department. Active research is continually in progress. Significant advance has been contributed to the knowledge of diabetes and of bone and kidney diseases. Special attention has been directed toward the physiologic significance of the inorganic constituents of the body both in health and in disease. Other lines of investigation are more directly concerned with problems of energy metabolism and nutrition.

The work of the Tirrill Metabolism Division should be of the greatest importance in the future of the Barnes Hospital and the various other institutions which are centered around the Washington University Schools of Medicine and Nursing.

The Bacteriologic Examination of Milk in the Hospital

By CARL W. APFELBACH, M.D.
Presbyterian Hospital, Chicago

In large centers pasteurization has almost completely eliminated the danger from milk as a means of disseminating pathogenic organisms. The thoroughness with which pasteurization is done may vary, however, and it is probably necessary that each hospital should check the bacterial counts and the type of organisms of its milk supply at frequent intervals.

Routine bacteriologic examinations of the milk used in Presbyterian Hospital during the last several years, reveals that the product of the larger dairies is thoroughly pasteurized. The milk uniformly has a lower bacterial count than that required by law and none of the usual pathogenic organisms formerly disseminated in commercial milk have been found.

A more important type of bacteriologic examination concerns cultures of milk at the time it reaches the patient. In this way faulty handling of the milk in the kitchen and defects in sanitation through uncleanliness on the part of the kitchen help and waitresses may be uncovered.

Hospitals in communities where pasteurization is not required should examine their milk supply routinely, especially since "bootleg milk" has entered the milk industry. This name is applied to milk sold at the immediate outskirts of communities where pasteurization is required, the milk coming from uncontrolled sources.

In addition to the bacteriologic examinations of milk, it is also important that ice cream be cultured regularly, because this product also can be a source of bacterial infection. The sanitary regulations concerning the places where ice cream is made have become more strict of late and it behooves hospitals that make their own ice cream to reexamine their methods in order to determine that the newer regulations are being observed.

The danger of tuberculous infection from milk is becoming less important because of the efficient control by the federal and state authorities.

In recent years undulant fever has become better recognized and in some instances is believed to be caused through milk from cows infected by organisms related to the Brucella abortus. Hospitals in smaller communities should investigate their source of milk supply so as to eliminate herds of cows infected with this organism.

In certain districts of North America a disease known as milk sickness occurs, presumably through the consumption of milk from herds that graze on pastures in which the white samicle (*Eupatorium ageratoides*) grows. It is suggested that in parts of the country where this plant is found the existence of this disease be borne in mind and that precautionary measures be taken.

It seems that of all institutions where food is served, hospitals should be foremost in adopting the suggestions made by public health officials and bacteriologists. This is especially necessary in the case of milk, because of its importance as a food and because it is so easily contaminated by bacteria.

Lack of Protein, Minerals and Vitamins Causes Pellagra

A badly balanced diet, deficient in proteins, minerals and vitamins, and composed mainly of highly milled cereals, sweets and lard or salt pork, is responsible for the disease known as pellagra, according to Hazel K. Stieberling, senior food economist, economic division, and Hazel E. Munsell, senior nutrition chemist, foods and nutrition division, U. S. Bureau of Home Economics, in a study of pellagra, made public by the department of agriculture.

Pellagra can result from subsistence for several months or even for shorter periods on this one-sided diet, it is stated. The disease does not occur because these foods are unwholesome in themselves, but because when they are eaten to the exclusion of all others the body is not supplied with certain essential food factors.

Abundance of milk, lean meat, fish and, to some extent, vegetables, provide the pellagra preventing factors. The necessary qualities are entirely lacking, it is stated, in refined flour, cereals, fats and sugar.

It has been estimated that about 200,000 persons in the United States suffered from pellagra in 1929. These cases occurred mainly in the South, among low income groups. In some instances ignorance of food values and faulty food habits were probably responsible for the condition, and in others an economic situation which put an adequate diet beyond reach.

In addition to factors outside the control of the families affected, the difficulties of the situation were often intensified by the failure to use to advantage the money available for food, or to make wise use of the land available for home food production.

NEWS OF THE MONTH

Course of Study Announced for Hospital Institute

Students attending the American Hospital Association's Institute for Hospital Administrators to be held at Chicago, September 18 to October 6, inclusive, will be offered a course dealing with practical subjects of hospital administration, together with general subjects of hospital organization and management. Each student will also have ample opportunity to study the particular subjects or departments in which he or she is especially interested.

Eight afternoons during the first two weeks will be devoted to visiting Chicago hospitals. During these visits, or clinics in hospital administration, hospital superintendents and their assistants will demonstrate for the benefit of visiting students the general organization and work of various departments. In the first week each student will make four visits to one hospital and in the second week he will visit different hospitals. The last week each student will spend his entire time in one or more hospitals, selecting institutions according to the particular departments or activities he wishes to study in detail. Conferences with each student and review of the course are scheduled for October 6.

Morning sessions will be divided into two periods, one beginning at 9:30 and one at 11 o'clock. During the first two weeks all students will be expected to assemble at 9:30. Subjects will be of a general character. Among the topics are principles of hospital planning, construction and reconstruction; different types of hospitals in the United States and Canada, their distribution and organization; hospital occupancy and methods of increasing it; relations of hospitals to the medical profession, public health work and social agencies; out-patient service; costs of hospital care and group hospitalization, and hospital ethics and publicity.

Many Prominent Speakers Will Participate

Speakers expected to take part in this course are Dr. S. S. Goldwater, New York City; Dr. M. T. MacEachern, American College of Surgeons, Chicago; Dr. Bert W. Caldwell, executive secretary, American Hospital Association, Chicago; Dr. Michael M. Davis and Dr. C. Rufus Rorem, Julius Rosenwald Fund, Chicago; the dean and faculty members of the University of Chicago school of business; officers of the Council on Medical Education and Hospitals of the American Medical Association, and the city health officer of Chicago.

The ten morning periods beginning at 11 o'clock will be devoted to discussions and seminars dealing with the organization of hospitals and such departmental problems as admissions, business management, nursing, food service, purchasing and supplies, out-patient departments, records and maintenance of plant.

Housing accommodations in one of the University of Chicago dormitories will be available at $21 for the full three weeks, $1.50 a day for less than three weeks and more than one, or $2 a day for less than one week. Meals may be had at the cafeteria of the University Clinics, at the International House dining rooms or at near-by inexpensive restaurants. Cost of food per person for one day at the University Clinics cafeteria is estimated at $1. Total cost of board and room for three weeks would be about $42. Small additional expenditures will be required for carfare to and from hospitals and students will need to make additional allowance for visiting A Century of Progress.

Railroads are offering special World's Fair rates to Chicago. Persons attending the American Hospital Association meeting in Milwaukee September 11-15 can take advantage of special rates with a stop-over on return.

Nursing Group Celebrates Fortieth Birthday at Chicago Meeting

Forty years ago, during the World's Fair of 1893, the National League of Nursing Education was founded in the nursing section of the Congress of Hospitals and Dispensaries. Appropriately therefore Chicago, again the scene of a World's Fair, was chosen as the meeting place for the annual convention of the league, held June 12 to 15.

Nurses from all parts of the country assembled in large numbers to take part in a program which included a wide variety of discussions on subjects related to nursing and nursing education. An exhibit commemorating the forty years history of the group was a feature that aroused great interest.

The presentation of the Saunders Medal to Clara D. Noyes, national director of the American Red Cross Nursing Service, was made at a special ceremony on the opening night at a meeting presided over by Effie J. Taylor, Yale School of Nursing, president of the league. The medal is awarded annually to a member of the American Nurses' Association and Miss Noyes is its fourth recipient.

One session was given over to a discussion of the hospital, the patient and the nurse. Those who gave talks at this time included C. Rufus Rorem, associate director of medical services, Julius Rosenwald Fund, Chicago—"Nursing. an Economic Paradox"; Blanche Pfefferkorn, director of studies, National League of Nursing Education—"Speaking of Students and Graduate Nursing"; Daisy Dean Urch, director, school of nursing, Highland Hospital, Oakland, Calif.—"Administrative Responsibilities of the Superintendent of Nurses in Relation to the Hospital"; Paul H. Fesler, superintendent, Wesley Memorial Hospital, Chicago —"The Concern of the American Hospital Association in Nursing Education." Problems of the hospital in relation to nursing were discussed at a conference presided over by E. Muriel Anscombe, superintendent, Jewish Hospital, St. Louis.

Reduction in the high cost of nursing was urged by Doctor Rorem in his talk. He pointed out that the average special nursing fee exceeds that for surgery or hospital care. "There are approximately 240,000 registered nurses in the United States which is more than the number of doctors," he said, "yet more than nine times as many families consult physicians as purchase nursing care." Doctor Rorem said the continued use of undergraduate nurses as employees interferes with hospital financing and serves to make the ranks of unemployed graduate nurses larger.

NEWS OF THE MONTH

New York State Hospital Group Has Successful Meeting

Timely topics relating to hospital problems occupied the attention of approximately 300 members of the Hospital Association of the State of New York at their conference held May 19 and 20 in Buffalo. As a result of the reports of executive officers and the discussions that ensued, several resolutions were adopted that are significant as depicting the attitude of hospital executives to meet squarely immediate needs borne of the present economic crisis.

The relationship existing between the medical practitioner and the hospital, for example, was emphasized in the report made by Boris Fingerhood, superintendent, Israel-Zion Hospital, Brooklyn, president of the association. "It is important for the hospitals of the state to meet the medical profession halfway," Mr. Fingerhood pointed out. "It is important that they make it clear to the medical profession that they are interested in its problem." A resolution was adopted, therefore, that a committee be appointed to meet with a similar committee of the state medical society for an investigation of the causes of the present difficulty and an inquiry into the social factors causing it, the purpose being to hear the point of view of organized medicine. "It is essential," Mr. Fingerhood explained, "that the hospitals clearly demonstrate their belief that the interests of the hospitals cannot be advanced unless the interests of the medical profession are advanced at the same time."

Group Hospitalization and Economics Discussed

It was also resolved to have a standing legislative committee made up of the representatives of the different municipalities of the state which would form an effective means of organizing for instantaneous and concerted action. It was resolved, too, that provision be made for a stagger system of appointments to the legislative committee.

The opening session was devoted for the most part to business matters, Frederick B. Cooley, president, Hospital Council of Buffalo, delivering the address of welcome. Several subjects of outstanding interest engaged the attention of members during the afternoon. Group hospitalization, for example, was introduced by Homer Wickenden, general director, United Hospital Fund, New York City. The ensuing discussion was led by J. J. Weber, superintendent, Vassar Brothers' Hospital, Poughkeepsie, and Dr. T. Dwight Sloan, superintendent, New York Post-Graduate Medical School and Hospital, New York City. "Community Relations and the Rôle of the Superintendent" was presented first by Dr. Walter S. Goodale, superintendent, Buffalo City Hospital, Buffalo, and later discussed by Rev. John P. Boland, diocesan director of hospitals, Buffalo.

Numerous practical subjects were presented at the Saturday morning session, all in keeping with the demand for new economies in hospital administration. Dr. George B. Landers, superintendent, Highland Hospital, Rochester, acted as chairman. Dr. M. S. Dooley, director of pharmacy, University Hospital, Syracuse, discussed in detail with the help of lantern slides the "Standardization and Economic Control of Drugs in Hospitals," citing specific examples where economies might be achieved at no sacrifice to quality. The important rôle of the hospital housekeeper and her contribution to economic retrenchment was presented by Eva M. Muirhead, superintendent, Hospital of the Good Shepherd, Syracuse. Dr. J. G. Copeland, superintendent, Albany Hospital, Albany, selected as his topic, "Cooperation of the Medical Staff in Reducing Costs." Much interest, too, centered upon a talk by Howard B. Meek, director of hotel courses, Cornell University, on "Hotel Administration and Its Application to Hospitals," and the subject of "Personnel, Selection and Training," which was covered by Louise C. Gerry, director, women's personnel department, Larkin Soap Company, Buffalo, and by Rob Roy MacLeod, University of Buffalo.

The remarks by Clara Quereau, secretary, board of nurse examiners, state education department, Albany, during the afternoon session provided much food for thought. In a discussion of the graduate *versus* student nurse service, Miss Quereau explained that figures showed that out of 100 girls in training, fifty dropped out before the end of two years and that of the remaining fifty only half passed the final examinations. She emphasized the tremendous waste involved in the equipment and time expended on these girls who never graduated and advocated training schools for nurses in connection with the medical colleges and universities where greater selectivity could be practiced in admitting students. Mary G. McPherson, superintendent, Ellis Hospital, Schenectady, acted as chairman of this meeting.

The chief social event was the annual banquet which took place on Friday evening. On this occasion, the principal speakers were David C. Adie, commissioner, state department of social welfare, and Dr. Nathaniel W. Faxon, president-elect, American Hospital Association.

T. T. Murray, superintendent, Memorial Hospital, Albany, was elected president of the association, and Julian Funt, Beth Israel Hospital, New York City, executive secretary.

Will Give Postgraduate Course in Tuberculosis Nursing

The Westchester School of Nursing, Grasslands Hospital, Valhalla, N. Y., has announced the opening on August 15 of a postgraduate course on tuberculosis nursing. Properly qualified graduate nurses will be given a six months' course of instruction in the tuberculosis division of the hospital.

The teaching staff of the school of nursing, the full-time tuberculosis clinicians and numerous others in the hospital organization will assist with this educational effort. Organization of the course was prompted by the difficulty which tuberculosis sanatoriums have experienced in finding qualified tuberculosis nurses and also, because of interest expressed in such a course by nurses and by sanatorium superintendents.

The educational features of the course will be adequate. Practical experience will be obtained in the wards of the new adult tuberculosis building and in Sunshine Cottage Preventorium, Grasslands Hospital. Dr. C. W. Munger is the medical director of Grasslands Hospital.

NEWS OF THE MONTH

A. H. A. Calls Special Meeting of Local Hospital Councils

Local hospital councils throughout the country have been invited by the American Hospital Association to send delegates to a special meeting to be held in Milwaukee during the annual convention of the association the week of September 11. Delegates are asked to come prepared to report for their communities upon the present situation and the future outlook of local hospitals.

The called meeting notice to officers and members of local hospital associations and councils, prepared by Dr. S. S. Goldwater, chairman of the council on community relations and administrative practice, follows:

Chicago, June 15, 1933

To the Officers and Members of Local Hospital Associations and Councils:

1. From 1931 to 1932 the average bed occupancy in the voluntary hospitals of the country is reported to have dropped from 63 per cent, an abnormally low figure, to 55 per cent. Today in many cities it hovers around 50 per cent. Sharply contrasting with this condition is an occupancy of 100 per cent plus in many city and county institutions.

2. In the opinion of the council on community relations and administrative practice of the American Hospital Association the present drift of hospital service from voluntary to public institutions can be checked, with advantage to the sick, by means of coordinated community programs.

3. Few municipalities or counties are at this time in a position to raise additional funds by local taxation for either new construction or additional hospital maintenance.

4. The marked decline in contributions and in patients' payments applicable for the support of voluntary hospitals should be offset by the creation or discovery of new sources of support, and it has been suggested that a measure of support so substantial as to change the present picture completely can be developed by means of a tie-up between hospitals and the great masses of the employed population, in a plan or plans involving a multitude of small periodic voluntary payments. It is not irrelevant to observe that in the critical years of economic depression following the World War, the voluntary hospital system of England was preserved in this manner, and that voluntary contributory schemes in which the bulk of the working class population participates are flourishing in England today; in 1931, for example, the Hospital Savings Association in London reported 929,000 contributors, whose contributions, made in small weekly payments through volunteer group secretaries, amounted to £516,000. This association is but one of many of the same character that are raising substantial sums for the support of England's voluntary hospitals today.

5. If new sources of voluntary support are not instituted, the demands upon the taxpayer for hospital support are likely to be so greatly increased as to bring about an unfortunate lowering of hospital standards.

6. Increasing demands upon the federal government to relieve distressing local hospital conditions that can and should be dealt with locally may be expected unless effective local reforms are instituted at an early day.

In view of these conditions, the American Hospital Association is inviting local hospital councils throughout the country to send delegates to a special meeting to be held in Milwaukee during the week of the annual convention of the association in September next, and in order to make the proposed meeting as fruitful as possible, it is suggested that the representatives of each existing local organization and of each community in which local cooperative effort is contemplated come to the meeting prepared to report for their communities, in the most concrete manner possible, upon the present situation and the future outlook of local hospitals as to

1. Bed occupancy.

2. The distribution of patient load among private and public institutions.

3. The extent to which desirable hospital services have been curtailed in consequence of the financial stringency.

4. The loss of normal income from private sources and the prospect of income recovery.

5. The adequacy of income from public sources to meet both present requirements and such probable future needs as exceed resources now in sight.

6. Whether the continuance of voluntary hospital service is regarded by the community as desirable and if so, whether any attempt has been or is being made to establish a contributory scheme or schemes for the purpose of broadening the social basis of support.

7. Whether any action other than the establishment of a contributory scheme is under consideration for the purpose of placing community hospital service on a sound and enduring financial footing.

It is respectfully suggested that this communication be considered promptly by your local hospital association or council, or in the absence of a local council by a representative group of local hospital executives acting in concert, and that the local organization hold itself in readiness to send delegates to the proposed special meeting in Milwaukee in September, precise notice of which will follow.

The opening session of representatives of the local hospital councils will be held in the ballroom of the Hotel Schroeder, Milwaukee, Monday morning, September 11, at 10 a.m., Dr. S. S. Goldwater, presiding.

Respectfully,

BERT W. CALDWELL,
Executive Secretary.

Campaign Gifts Prevent Closing of Child's Hospital

Active steps are being taken to keep going the work of the New York Nursery and Child's Hospital, New York City, through a drive to raise $100,000 for its maintenance. Over half that amount has already been secured, and the campaign will be carried on beyond its original closing date of July 1. The institution is the city's oldest maternity hospital in years of unbroken service.

Patients cared for during the past year numbered 4,445, with 28,094 treatments administered. A total of 1,140 mothers and 872 babies received 21,485 days of care.

UNIFORM X-RAY FILMS Increase Technical Efficiency

LET him look at head, chest, or abdomen, and your x-ray technician can tell what the exposure factors should be. He can judge tissue density. He understands the relationships of distance, kilovoltage, and milliamperage. These are his qualifications to produce radiographs which enable your radiologist to provide definite information.

But full utilization of this personal ability depends upon the uniformity of the x-ray films he must use. If he can't rely upon them, the whole structure topples. Variation in film is something he can't judge. Only dependable uniformity can make his knowledge fully effective.

Eastman X-ray Films have a world-wide reputation for uniformity—and in addition, they provide maximum sensitivity and exposure latitude. They widen the scope of your x-ray service. They produce radiographs that please your staff. They promote economy with increased efficiency. Eastman Kodak Company, *Medical Division*, Rochester, New York.

Effective May 22, Eastman reduced the price of Safety X-ray Film to that of Nitrate. Through this action, the last obstacle to the universal use of Safety X-ray Film was removed.

NEWS OF THE MONTH

A. M. A. Convention Draws Big Attendance

The American Medical Association, at its meeting in Milwaukee, June 12 to 16, named Dr. Walter Bierring, Des Moines, Iowa, president-elect of the association. The meeting was attended by approximately 4,500 physicians. It was voted to hold the next meeting in Cleveland.

New Kings Hospital Unit Will Open August 1

The new $7,000,000 main building of Kings County Hospital, Brooklyn, N. Y., will be ready for occupancy August 1, it was announced recently by Dr. Adam Eberle, superintendent. With the completion of the new building, the Kings County unit will be the second largest municipally controlled hospital in the world.

Ultramodern in its furnishings and decorations, the new building will have radios at every bed, roof gardens, brightly colored walls and all the conveniences of a luxurious hotel. It will be used for acute cases of all kinds. Chronic cases will be sent to the old buildings, which will be overhauled and redecorated. The new building has a capacity of 1,200 beds, and its dining rooms will seat 2,700 persons.

Five hundred of the hospital's patients are already in the new building. No increase in the number of employees will be made, according to Doctor Eberle, because of the city's financial condition. The present staff of 1,400, which includes doctors and nurses, will man both the new and the old buildings.

A. H. A. Enlists Committee to Perfect Accounting Methods

A special advisory committee on accounting has been enlisted by the division on accounting of the council on community relations and administrative practice of the American Hospital Association. The committee's function will be development of methods by which hospital statistics and accounts can be made of maximum value to the hospital world. Dr. B. C. MacLean, Touro Infirmary, New Orleans, is chairman of the division on accounting.

The advisory committee includes the following: C. Rufus Rorem, chairman, Julius Rosenwald Fund, Chicago; G. W. Curtis, hospital consultant, San Francisco; Graham L. Davis, Duke Endowment, Charlotte, N. C.; J. R. Mannix, University Hospitals, Cleveland; Herbert R. Sands, United Hospital Fund, New York City, and W. H. Savin, Welfare Federation of Philadelphia.

The tentative scope of the advisory committee's work in connection with the division on accounting will include the following responsibilities: (1) proposals of definitions for certain important financial and nonfinancial units of hospital service which should be measured, recorded, and reported by all hospitals; (2) outlining of uniform reports, financial and nonfinancial, which would serve the various purposes of hospital statistics and accounts outlined as above; (3) outlining of uniform records, financial and nonfinancial, which will facilitate preparation of the reports. This does not mean that all hospitals should adopt similar bookkeeping procedures but it does suggest the idea and need for recommending to the association a uniform classification of accounts.

Along with the consideration of definitions the advisory committee and accounting division will discuss a tentative classification of accounts intended to incorporate the most desirable features of the various uniform classifications now in existence. Among these are the suggested uniform systems heretofore recommended by the American Hospital Association, as well as those adopted by agencies or groups represented by members of the advisory committee.

Any proper accounting classification is designed to facilitate the achievement of the three following objectives: (1) establishment of administrative responsibility for the expenditures of departments within a hospital; (2) comparison of the incomes and expenses of the various professional revenue producing services of the institution; (3) applicability of the classification of accounts to either large or small hospitals with suggestions for expansion or condensation to fit the particular institution concerned.

The chairman of the advisory committee and the chairman of the division on accounting invite comments or specific suggestions on any phases of this work.

Hospital Prepayment Plans Outlined in New Booklet

Group hospitalization is a reasonable procedure to be adopted in the interest of public welfare, rather than a temporary depression measure or a desperate plan of raising revenue from a new source, points out C. Rufus Rorem, consultant on group hospitalization, council on community relations and administrative practice, American Hospital Association, in a new booklet entitled "Hospital Care in the Family Budget."

Many families that now demand free hospital and medical care could be self-supporting as far as hospitalization is concerned if the bills were "budgetable" and payable in small regular amounts, the author states. Plans whereby groups of persons make equal and regular payments into a common fund to be used for the purchase of hospital service to subscribers when the need arises, average annual rates paid by subscribers and benefits included in group hospitalization are discussed in the booklet.

Other topics are Citywide *Versus* Single Hospital Plans, Sponsorship and Control, Diseases and Conditions Treated, Dependents and Family Members, Group Hospitalization and the Medical Profession, Economic and Statistical Problems of Participating Hospitals, Payments to Participating Hospitals, Promotion and Administration and Legal Status of Group Hospitalization. A list of group hospitalization plans in operation in the United States is also given.

NEWS OF THE MONTH

United Hospital Fund Renders Year's Report

The fifty-six hospitals associated with the United Hospital Fund of New York last year spent over $7,000,000 more on the care and treatment of patients than they received from them, it was announced on June 19. The inability of increasing numbers of persons to pay in full or in part for hospital care is indicated, it was said, by the fact that over 50,000 patients received free care, about 3,000 more than in the previous year.

A study just completed by the fund shows that the group of hospitals spent $25,132,075 and received only $17,508,920 in fees from patients, leaving $7,623,135 to be met from other sources. In addition to their income from endowments the hospitals still required nearly $4,000,000 in voluntary subscriptions from the public to carry on their work. The gifts and donations actually received in the year, applicable to current operating expenses, totaled $3,834,305.

Receipts from paying patients in the institutions dropped to $12,302,471 last year from $14,192,478 the previous year. This deficiency was partly offset by increased payments from the city for public charges, which amounted to $2,362,279 last year, as compared with $1,521,264 in 1931.

New Huntington Hospital Nears Completion

With befitting ceremonies which attracted a large audience of interested friends, the cornerstone of the new building of the Huntington Hospital, Huntington, N. Y., was laid on June 3. The new structure has a capacity of 75 beds and sixteen bassinettes, and includes a thoroughly modern x-ray department, maternity suite, emergency room, nursery, food service room and laboratory. It will be ready for occupancy in the fall. Crow, Lewis & Wick are the architects, with Dr. S. S. Goldwater, New York City, as consultant.

Agnes Martin is superintendent of the institution.

Great Lakes Institute Will Be Held July 24 to 29

College Camp, Lake Geneva, Wis., will be the scene during the week of July 24 to 29 of the annual Great Lakes Institute, sponsored as in the past by the Community Chests and Councils, Inc., New York City. The subject for this year's institute will be "Trends in Social Work." Institute members will be drawn from Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North and South Dakota, Ohio and Wisconsin.

As in other years, this general subject will be approached from four points of view. The executive committee, including section officers, will have responsibility for the program as a whole, but there will be four section committees, on one of which each person in attendance will participate during the week. The various sections will discuss present status and trends in regard to: (1) specialization in social work; (2) centralization of authority in local social work programs; (3) medical care, and (4) governmental participation in and control of social work.

C. Rufus Rorem, associate director of medical services, Julius Rosenwald Fund, Chicago, will be chairman of group discussion number three, which will take as its individual topic, "Present Status and Trends in Respect to Medical Care."

Big Attendance, Prominent Speakers Feature Minnesota Meeting

The Minnesota Hospital Association under the direction of its president, James McNee, Duluth, and its secretary and treasurer, A. M. Calvin, St. Paul, held a well attended and enthusiastic meeting on May 25 and 26 at the Curtis Hotel, Minneapolis.

Among the speakers at the regular sessions and the public meeting were Dr. George F. Stephens, president, American Hospital Association; Dr. Erling W. Hansen, president, Hennepin County Medical Society; Dr. Bert W. Caldwell, executive secretary, American Hospital Association; Dr. Malcolm T. MacEachern, director of hospital activities, American College of Surgeons; Dr. Charles H. Mayo, Mayo Clinic, Rochester, Minn., and C. Rufus Rorem, associate director of medical services, Julius Rosenwald Fund, Chicago.

On the first day, following a group of interesting reports by members of the committee, the afternoon was devoted to the costs of medical care and group hospitalization.

At the afternoon session on Thursday afternoon, May 25, Dr. R. E. Scammon analyzed the problems of the costs of medical care, pointing out the fact that they are continuous and require such practical solution as each era appears to demand. C. Rufus Rorem, consultant on group hospitalization to the American Hospital Association, presented the attitude and recent action of the association by which it has approved the general principles of group hospitalization as a public service rather than primarily as a scheme of hospital financing.

Interesting round table discussions covering the economics of the administration of hospitals included the important departments of hospital management and were participated in by many leading hospital administrators of Minnesota. The Thursday round table was under the direction of J. J. Drummond, manager, Worrell Hospital, Rochester, and the Friday session was led by Robert E. Neff, administrator, University of Iowa Hospital, Iowa City.

Joseph G. Norby, superintendent, Fairview Hospital, Minneapolis, took office as president of the association for the year 1934, and J. H. Mitchell, Kahler Hospital, Rochester, was made president-elect. Arthur M. Calvin, executive manager, Midway and Mounds Park Hospitals, St. Paul, was reelected secretary-treasurer of the association.

NEWS OF THE MONTH

Mississippi Favors State Aid Plan for Indigent Sick

At its annual meeting held recently in Jackson, the Mississippi State Hospital Association went on record as favoring legislative action for state aid to the indigent sick in voluntary hospitals, as recommended by the committee on community hospital legislation of the Mississippi State Medical Association.

Dr. R. J. Field, superintendent, Field Memorial Hospital, Centreville, was elected president of the association, and Dr. Leon S. Lippincott, superintendent, Vicksburg Sanitarium and Crawford Street Hospital, Vicksburg, secretary-treasurer.

It was voted to invite the state hospital associations of Alabama, Arkansas, Kentucky, Louisiana and Tennessee to meet with the Mississippi association in joint session next year.

The Mississippi State Nurses' Association was invited to exchange official representatives at the meetings of the two associations.

The next meeting of the Mississippi State Hospital Association will be held at Natchez on May 7, 1934, in conjunction with the meeting of the state medical association.

New York Post-Graduate Ends Fifty Years of Service

The New York Post-Graduate Medical School and Hospital, New York City, ended its first half century of service at the close of 1932 with an outstanding record of achievement. During that period, according to the hospital's annual report, 263,951 patients were cared for, 1,599,022 persons were treated in the out-patient department, and more than 29,000 physicians received postgraduate training.

A substantial saving in operating expense in the past year over the year preceding was shown, amounting to $215,217. Saving in salaries alone totaled approximately $114,297, while saving on food and cost of equipment and supplies was placed at $73,000. Hospital care was given during the year to 9,617 bed patients at a cost of $7.49 a day each, and the 273,577 visits paid to the clinics cost the hospital an average of $0.84 each.

$2,000,000 Trust Fund Endows Free Dental Clinic

A trust fund of more than $2,000,000 to establish and maintain a free dental dispensary for the needy is created by the will of the late W. G. Zoller, former vice president and treasurer of the Bell & Zoller Coal Company, Chicago.

The $2,000,000 trust fund according to the terms of the will shall be turned over to the University of Chicago by the trustee of the estate, the First Union Trust and Savings Bank, Chicago.

The university shall use the income of the fund "for the purpose of equipping and maintaining dispensaries and laboratories and to supply competent and skillful dental service, including diagnostic aids to the needy and poor, free of charge, in such manner that the greatest number of people may secure skillful treatment to enable them to be relieved, and to prevent the numerous ills which result from neglect of the teeth."

New "Talkie" Tells How Modern Hospital Operates

In an attempt to make clear to the public the "why" of the so-called high cost of medical care and hospitalization, the American College of Surgeons has completed a talking motion picture which tells the story of modern hospital procedure in a clear, concise way. The talkie will soon be released for showing to the medical profession, persons in the hospital field and the general public.

The introductory remarks are made by Dr. Franklin H. Martin, director general, American College of Surgeons, and the synchronized explanation that accompanies the picture is supplied by Dr. Malcolm T. MacEachern, associate director in charge of hospital activities.

The main part of the picture is devoted to hospital procedure in the care of the patient. Everything is explained clearly by Doctor MacEachern in his talk. After having seen this picture a person will recognize that the principal consideration of the hospital is the proper care of the patient. The picture is expected to aid hospitals in their public relations problem.

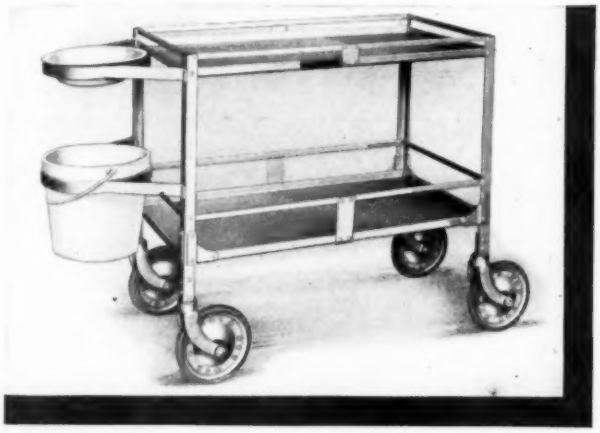
Psychiatrists Set Up Board of Examination

Establishment of a board of examination possessing authority to issue diplomas certifying physicians competent to specialize in mental and nervous diseases was agreed upon at the meeting of the American Psychiatric Association, held recently in Boston. Candidates for a diploma, it was emphasized, would be required to show at least six years of specific training and experience in the field of psychiatry after graduation from an approved medical school—also a satisfactory internship.

Dr. George H. Kirby, New York City, formerly director, state psychopathic institute and professor of psychiatry, Columbia University, was elected president of the association. Other officers elected were: Dr. C. F. Williams, superintendent, South Carolina State Hospital, Columbia, vice president; Dr. W. C. Sandy, director, state bureau of mental health, Harrisburg, Pa., secretary.

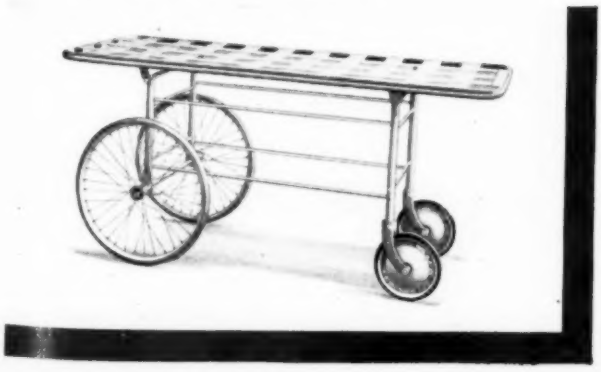
The American Association for the Study of the Feeble-Minded, which held joint sessions with the psychiatric association, appointed as president Dr. Ransome A. Green, superintendent, Walter E. Fernald State School, Waverley, Mass.

• FOOD CONVEYOR—ELECTRICALLY HEATED



• SURGICAL DRESSING TRUCK

• DISH TRUCK FOR KITCHEN SERVICE



• ONE OF SEVERAL LITTER STRETCHERS

NEWS OF THE MONTH

Medical Social Workers Meet in Detroit

Members of the American Association of Hospital Social Workers held their annual meeting in Detroit, June 12 to 16. As an associate group of the National Conference of Social Work, opportunity to share in the thinking and the planning of the entire conference is provided in this great meeting. The total attendance approximated 3,500: medical social workers represent a relatively small group as a part of the larger one. Like the entire conference the medical social workers in their programs displayed a note of adaptability, of experimentation and an enthusiasm and a willingness to meet new demands with new efforts and the use of all the scientific skill available. Sounding "Adaptability" as her keynote, Elizabeth Gardiner in her presidential address urged the wider study and use of the fields of political science and economics in the building of future programs in medical social work. The increased demands made upon the tax supported hospitals and the development of sound programs in those institutions as well as developments in public welfare in the larger areas, call for the added use of the field of political science. The reports of the Committee on the Costs of Medical Care and other current studies reveal the needs of the wider use of the field of economics.

Figures collected by the United States Children's Bureau indicate that there has been a heavy increase in case load of the medical social workers during the past three years. Other figures indicate that this added case load has been carried with little or no increase in personnel. New opportunities as medical social consultants in the field of family and children's work are apparent as trends. Increased cooperative services to practicing physicians through the local medical societies or through group clinics are also trends of development in this field which challenge the adaptability of the social workers. Throughout the reports of the local districts there is increasing evidence of the participation of medical social workers in community planning and social development.

Encouraging Report Is Presented

The report of the educational secretary, Kate McMahon, revealed the growth and development of the professional courses in the schools of social work. Gratifying indeed are the reports from the newest course to be developed in the medical social work field, namely that at the University of California. The introduction of more professionally trained medical social workers is bringing encouraging results to the field.

There were two general sessions each presenting a subject of vital interest to medical social workers. The first was devoted to presentation and discussion of insurance. Dr. George F. McCleary, former commissioner of public health for Great Britain and Ireland, described the history and development of the British system and briefly discussed some of the social results. Dr. Michael M. Davis, director of medical services, Julius Rosenwald Fund, gave late information on group hospitalization and its relation to medical practice. Discussion by Elizabeth Wisner, acting director, school of social work, Tulane University, New Orleans, and by Mrs. Charles W. Webb, director, social service department, University Hospitals, Cleveland, emphasized the significance to the medical social workers and their responsibilities in the social programs of the day.

The second meeting gave the results of the association's seventh case competition. Thirty-six members had submitted cases and at this meeting the committee appointed to define the terms of the competition and to evaluate the cases, reported on their findings. Here too it is perhaps significant of the general trend of the times that recognition was especially given to two cases representing very short time contacts. It is thought by some that the cases selected, one submitted by Mrs. Yvonne Ford, staff worker in the social service department of the Children's Memorial Hospital, Chicago, and the other submitted by Georgia Ball, staff member of the social service department, Michael Reese Hospital, Chicago, illustrate effectively the importance of skilled social study on quick turnover.

One of the achievements of the association was apparent in the publication and distribution of the Hand Book on Statistical Reporting in medical social work. This is the result of some five years of cooperative effort by representatives of the association and the United States Children's Bureau. Preliminary reports indicate an encouraging result in comparing the figures of departments of social work in various parts of the country. By the use of the method outlined in this handbook comparable statistics are possible. It is obvious that this will have a marked effect upon the field because in this way it will be possible to trace and develop statistical trends.

Social work in tuberculosis sanatoriums was described by Marie Lurie, director of social work, Jewish Tuberculosis Service, Chicago, in reporting a study made during the past years. Social work with patients suffering with eye diseases was also described and discussed.

Antoinette Cannon, New York School of Social Work, was the speaker at the fifteenth anniversary dinner. At the National Conference of Social Work held in Kansas City in 1918, the American Association of Hospital Social Workers was organized. There were thirty charter members. This year the association celebrated that organization with three of the thirty charter members actively participating in the field of social work, present at this dinner. Miss Cannon recalled vividly the first days of the association, showing copies of the early editions of the first bulletins. She traced the development of the association in its growth of members, its activities and its publications. She then looked into the future and suggested that social changes will bring about some significant health changes.

Hospital Field Represented at Housekeepers' Banquet

The hospital field was well represented at the annual dinner of the National Executive Housekeepers Association, which took place June 1 at the Hotel Biltmore, New York City. The speakers included John McCormack, superintendent, Presbyterian Hospital, New York City.

PERSONALS

CHARLES BATES STRAYER has resigned as superintendent, Norwalk General Hospital, Norwalk, Conn., effective July 1. MR. STRAYER joined the institution as assistant superintendent shortly after the World War, and two years later was appointed superintendent.

DR. NEAL N. WOOD, formerly medical superintendent, Los Angeles County General Hospital, Los Angeles, is now director, Hillman Hospital, Birmingham, Ala.

KATE E. BEAL has resigned as superintendent, Whidden Memorial Hospital, Everett, Mass.

DR. N. T. MOORE has succeeded DR. A. B. STEWART as superintendent, New Mexico Insane Asylum, Las Vegas, N. M. DOCTOR MOORE was formerly assistant superintendent of the institution, a position now being filled by DR. HAROLD M. MORTIMER.

REV. DR. ABRAM S. CAVANAGH, formerly superintendent, Methodist Episcopal Hospital, Brooklyn, N. Y., died June 12 at his home in Brooklyn after a year's illness.

FRANCIS C. LEUPOLD has resigned as superintendent, Montgomery Hospital, Norristown, Pa.

CHARLES S. PITCHER has resigned as superintendent, Presbyterian Hospital, Philadelphia, effective June 1. MR. PITCHER, will devote his entire time to hospital consultant work after July 1, with headquarters in Philadelphia.

RUBEN A. RYDEN, superintendent, Lutheran Hospital, Cleveland, died suddenly at the hospital on June 7.

HELEN WISE, superintendent, Peninsula General Hospital, Salisbury, Md., has resigned, and MRS. ELMER WALTON has been named acting superintendent of the hospital.

DR. WILLIAM L. KELLER is the new superintendent, Western State Hospital, Fort Steilacoom, Wash.

MARTIN H. LUECKE is the new superintendent, Irene Byron Tuberculosis Sanatorium, Fort Wayne, Ind.

DR. GEORGE E. CHARLTON, superintendent, Hastings State Hospital, Ingelside, Neb., has been transferred back to Norfolk State Hospital, Norfolk, Neb., where he had charge for fifteen years, up to two years ago. DR. J. C. NIELSEN, who has been superintendent at the latter institution, has been named superintendent at Hastings State Hospital.

MARTHA F. LEAP, formerly assistant superintendent, Bartholomew County Hospital, Columbus, Ind., has been appointed superintendent of the institution.

VECIL SPARKS has been appointed superintendent, Wells County Hospital, Bluffton, Ind., succeeding MRS. DEAN FERGUSON. MISS SPARKS was formerly night superintendent, Methodist Episcopal Hospital, Fort Wayne, Ind.

MABEL GOLDMAN is the new superintendent, Cookeville City Hospital, Cookeville, Tenn., succeeding KATE SMITH.

REV. CHARLES W. CURRY has been named superintendent, Warren A. Candler Hospital, Savannah, Ga., succeeding REV. CHARLES G. EARNEST.

ETHEL COLE, supervisor, Hamot Hospital, Erie, Pa., has accepted the post of superintendent, Corry Hospital, Corry, Pa., succeeding ADELAIDE BARTLETT.

EDWARD ROWLANDS, for the past eight years assistant administrator, Indiana University School of Medicine and Hospitals, Indianapolis, has been named superintendent, Martha Washington Hospital, Chicago, succeeding E. V. DORON, resigned.

FLORENCE A. TUNISON has been named superintendent of the new Hayes-Green Memorial Hospital, Charlotte, Mich.

CLARENCE H. BAUM has resigned as superintendent, Lake View Hospital, Danville, Ill. MARGARET ARNOLD, superintendent of nurses, is in active charge of the hospital.

JOHN O. STEEL has been appointed superintendent, Davis Hospital, Pine Bluff, Ark. MR. STEEL was for six years business manager, Missouri Baptist Hospital, St. Louis, and for one year served as assistant superintendent, St. Louis County Hospital, Clayton, Mo.

ELLEN G. SMITH has leased the Whitewater Hospital, Whitewater, Wis., from MARY SWEET.

DR. HARRY D. CLOUGH, assistant medical director, Rochester General Hospital, Rochester, N. Y., has been named acting medical director of the institution to succeed DR. CHRISTOPHER G. PARNALL, who was recently appointed city commissioner of public welfare.

DR. H. M. FRANCISCO, clinical director, Western State Hospital, Bolivar, Tenn., has been appointed superintendent, Eastern State Hospital for the Insane, Knoxville, Tenn., succeeding DR. R. E. L. SMITH.

P. A. BRENNAN, superintendent, Douglas County Hospital, Omaha, Neb., died recently of heart disease, following an illness of about six weeks.

DR. GEORGE W. STEPHENS has been named superintendent, New Mexico Home & Training School for Mental Defectives, Los Lunas, N. M., succeeding DR. M. O. BLAKESLEE, who has held the position for the past five years. DOCTOR STEPHENS was formerly superintendent, Arizona State Hospital, Phoenix, Ariz.

EDITH MARTIN has been named superintendent, Stouder Memorial Hospital, Troy, Ohio, succeeding KATHRYN M. POND, resigned.

MRS. H. O. THORSON has resigned as superintendent, Mobile Infirmary, Mobile, Ala., effective July 1, and will be succeeded by KATHERINE WHITE SPUNNER, formerly superintendent, Biloxi Hospital, Biloxi, Miss.

CORAL M. PAGE, formerly superintendent, Lancaster Municipal Hospital, Lancaster, Ohio, has been named superintendent, Memorial Hospital, Piqua, Ohio. TERESA CHALMERS has been serving as acting superintendent of the institution since the resignation of R. A. BATES.

DR. MYRON D. MILLER, former assistant superintendent, Franklin County Tuberculosis Hospital, Columbus, Ohio, has been appointed superintendent of that institution to fill the vacancy created by the death recently of DR. C. O. PROBST.

SISTER ROSE VINCENT, superintendent, St. Mary's Hospital, Passaic, N. J., for the past thirty-four years, died recently after a long illness.

I am a Patient

I am one hundred per cent for this particular type of curtain screening. It gives me privacy—and I need it.

I can't afford a private room but I am able, and perfectly willing, to pay a bit more for accommodations like these, rather than to be in an open room or one that has makeshift screening like I've often seen.

When necessary, the nurse can completely enclose my bed in a jiffy. In fact the curtains are so easy to use that the nurses never do anything for me without screening the entire bed. There's never any possibility of gaps or spaces, so that I have a feeling of complete privacy—and I certainly do appreciate it.

This same sense of privacy means a whole lot when friends come to visit me.

Yet most of the time I like to see what's happening in the rest of the room and to chat once in a while with other patients in nearby beds. It helps to pass the long hours—particularly now that I'm convalescing. Another thing I like about this screening is that with the curtains pushed back against the wall the room is unusually bright and cheerful—and there's nothing to interfere with the ventilation on these warm days and nights.

Naturally I hope I don't have to go to a hospital again very soon, but if I do, I certainly will be sure to select one with this kind of screening.

* * *

Why don't you provide *your* patients with the advantages of this modern system of bedside screening? Day's Cubicle Curtain Equipment creates private room atmosphere in semi-private rooms—makes wards more private, more orderly, more livable—aids the personnel in the performance of their duties. In hundreds of hospitals throughout the country they are providing this *plus* service for patients—and find it a decidedly profitable investment.

Originated, developed, and manufactured by the H. L. Judd Company, Day's Cubicle Curtain Equipment is sold direct to hospitals. Our Engineering Department will gladly make a careful study of your particular needs and then submit recommendations which will assure you of a high quality product at a price comparable with any other screening.

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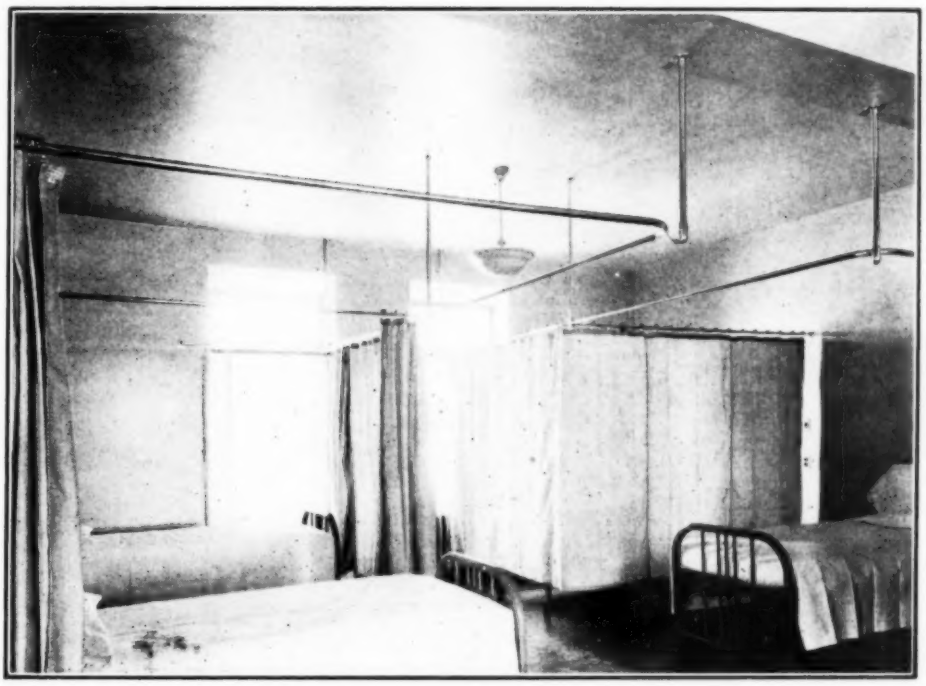

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M.H.-7-33

Missouri Elects New Officers

At its recent meeting in Kansas City, the Missouri Hospital Association elected Walter J. Grolton, superintendent, City Hospital No. 1, St. Louis, president of the association for the ensuing year. V. Ray Alexander, St. Louis, was elected executive secretary.

Pennsylvania Nurses Victorious in Legislative Battle

The Pennsylvania State Nurses Association has achieved an important victory in defeating proposed amendments to the administrative code that would take away from the association the right to nominate members of the state board of nurse examiners, would jeopardize the employment of a professional woman as secretary of the board and would abolish the two positions of state educational advisers.

The victory was won by hard work on the part of nurses in every part of the state in establishing personal contacts with legislators. Organized groups of laywomen also assisted in the campaign.

New Illinois Law Protects Infants Against Blindness

A new law which makes obligatory the use of 1 per cent solution of silver nitrate, or some equally effective prophylactic, in the eyes of all newborn infants will become effective in Illinois on July 1.

The law is designed to prevent blindness from ophthalmia neonatorum. This disease formerly ranked fourth in the United States as the most frequent cause for blindness. By bathing the eyes with a solution of silver nitrate immediately after birth, the eyes are protected against infection. This practice has been general in Illinois for many years, and the new law will extend the protective measure to the relatively few infants who have not been thus safeguarded in the past.

Silver nitrate solution for this purpose is distributed free upon request to the state department of public health.

Coming Meetings

American College of Surgeons.
President, Dr. J. Bentley Squier, New York City.
Director general, Dr. Franklin H. Martin, 40 East Erie Street, Chicago.
Next meeting, Chicago, October 9-13.

American Dietetic Association.
President, Dr. Kate Daum, University of Iowa Hospital, Iowa City, Iowa.
Business manager, Dorothy I. Lenfest, 185 North Wabash Avenue, Chicago.
Next meeting, Chicago, October 9-12.

American Hospital Association.
President, Dr. George F. Stephens, Winnipeg General Hospital, Winnipeg, Man.
Executive secretary, Dr. Bert W. Caldwell, 18 East Division Street, Chicago.
Next meeting, Milwaukee, September 11-15.

American Protestant Hospital Association.
President, Rev. Thomas A. Hyde, Christ Hospital, Jersey City, N. J.
Executive secretary, Dr. Frank C. English, 3233 Griest Avenue, Cincinnati.
Next meeting, Milwaukee, September 8-11.

NEWS FROM MANUFACTURERS

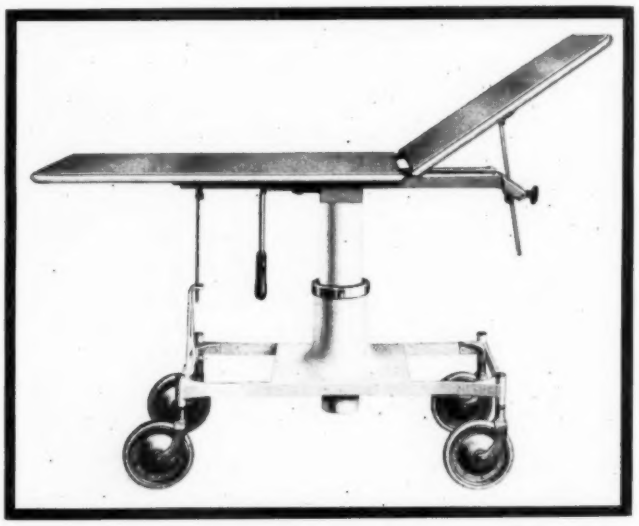
TWO ADJUSTABLE HOSPITAL CARRIAGES

A hospital carriage equipped with a hydraulic raising and lowering mechanism and an adjustable head section is a recent product of F. and F. Koenigkramer, 1914 Western Avenue, Cincinnati. The "Reliance" hospital carriage eliminates the necessity of attendants having to lift the patient from the level of the bed to the level of the operating or x-ray table.

The change of height is accomplished by a few strokes of the hydraulic pump lever while the patient is on the carriage. It has been found that only two attendants are required to handle even the heaviest patient.

The hydraulic mechanism allows an adjustment of 11 inches, the lowest point being 27⅜ inches. The hydraulic pump lever may be operated from either side of the carriage. To raise the carriage it is necessary to pump the lever from a vertical position about three-fourths the way; to lower it, the lever is brought to its highest point.

The adjustable head section allows the patient, together with the entire mattress, to be instantly adjusted from a horizontal to a sitting position. An automatic clutch lock controls the head section, which may be raised simply by lifting it. The clutch handle must be released in order to lower the head section.



A hydraulic mechanism raises and lowers this hospital carriage.

The table top is 24 by 72 inches, and is made of heavy sheet steel that is welded to a strong channel iron frame. It is finished in aluminum bronze lacquer. A nonmarring rubber bumper encircles the table edge for protection.

The frame is made of heavy steel and is securely anchored to a cast iron base. The frame and base are finished in white duco. The rubber tired wheels are of ball bearing construction and are eight inches in diameter.

Another new product is the "Reliance" spinal anesthesia wheel stretcher which embodies a similar construction, and also employs a hydraulic lift for raising and lowering the stretcher top. Little physical effort is required to operate the stretcher. The weight of the patient's body automatically balances the stretcher top and allows the attendant to lock the top at the desired angle.

A FOOD CONVEYOR FOR SMALL GROUPS

A food conveyor designed especially for serving small groups of patients is being offered by the Prometheus Electric Corp., 401 West Thirteenth Street, New York City.

The conveyor is equally adapted for handling special diets in the larger hospitals where from ten to fifteen patients are to be fed, and for the smaller hospitals. It is easily handled, because of its short wheel base, and fits into a small elevator without difficulty. A large amount of food can be transported in this conveyor which is designated as Model 1030. It is equipped with three four-quart

containers and four three-quart containers in addition to a meat pan, 11 by 11 by 4 inches. The drawer below the meat pan may be used for the storage of two utensils, such as are used in the meat pan.

Another feature which is worthy of note is the door. This is completely protected by a rubber bumper and folds out of the way so as to minimize the danger of breakage.

A WASHABLE WALL COVERING MATERIAL

A wall covering material that provides the desirable qualities of linoleum with designs and colorings especially suited for use on walls has been produced by the Armstrong Cork and Insulation Co., Lancaster, Pa.

The new Linowall is made with two types of backing material. One is a resilient linoleum composition calendered on a closely woven fabric back, and the other is a less expensive material of especially treated heavy felt in flexible sheet form on which a surface of fast color, durable lacquer has been applied to simulate the gloss and luster of ceramic tile. The fabric backed Linowall has the pattern throughout its thickness, which gives it a longer wearing surface than the printed felt type.

Linowall is made in a wide range of colors and in marble patterns, tile effects, and wood grain colorings. The surfaces are easily cleaned with a mild soap and water, and are impervious to grease, dirt and water marks.

This material may be applied to new walls, or to old walls that have been properly prepared by having all cracks filled so that the surface of the plaster is smooth and even.

Linowall may be installed from floor to ceiling, or just a wainscot of the wall covering may be used. When used as a wainscot either an enameled wood cap molding or a metal cap strip may be used.

A continuous linoleum surface may now be obtained in any room by the use of floor linoleum, the Armstrong Linoleum Cove and Base and Linowall. These materials make a sanitary and easily cleaned room.